

Yungtay Elevator

Connecting Elevator with Artificial Intelligence
Yungtay E PASS Smart Safety Elevator

Hitachi Yungtay Elevator Co., Ltd.

<https://en.hitachi-yungtay.com.tw>

Headquarter +886 2 2717-2217
11F., No. 99, Fuxing N. Rd., Songshan Dist., Taipei City 105, Taiwan (R.O.C.)

Taoyuan Plant +886 3 325-4161
No. 1352, Chunri Rd., Taoyuan Dist., Taoyuan City 330, Taiwan (R.O.C.)

Building System Branch +886 2 2709-3355
No. 6, Aly. 54, Ln. 63, Sec. 2, Dunhua S. Rd., Da' an Dist., Taipei City 106, Taiwan (R.O.C.)

Taoyuan Branch +886 3 317-1879
No. 29, Ln. 1314, Chunri Rd., Taoyuan Dist., Taoyuan City 330, Taiwan (R.O.C.)

Taichung Branch +886 4 2472-7878
3F., No. 98, Sec. 2, Dongxing Rd., Nantun Dist., Taichung City 408, Taiwan (R.O.C.)

Tainan Branch +886 6 303-8600
No. 18, Dongqiao 1st Rd., Yongkang Dist., Tainan City 710, Taiwan (R.O.C.)

Kaohsiung Branch +886 7 761-5161
No. 200, Dashun 3rd Rd., Lingya Dist., Kaohsiung City 802, Taiwan (R.O.C.)

Service Center +886 2 2701-7060
No. 6, Aly. 54, Ln. 63, Sec. 2, Dunhua S. Rd., Da' an Dist., Taipei City 106, Taiwan (R.O.C.)

Elevate Your Quality of Life



VDI 4707



ISO 9001



ISO 14001



ISO 45001

Catalog No: YT-EL-0189

2023.11

11F, No. 99, Fuxing North Road, Taipei TEL / +886 2 2717-2217 FAX / +886 2 2718-6082
Our Company reserves the rights to change the specifications, please be reminded that the information in regard with those changes shall not be notified later. Please contact our Company for further details.

VAG

Machine Room-Less
Passenger Elevator

 **日立永大電梯股份有限公司**
Hitachi Yungtay Elevator Co., Ltd.



Taipai - Presidential Office Building



Taipai - "Your Majesty" Building



Taipai - Veterans General Hospital



New Taipei City - Four Points by Sheraton Linkou



Taichung City - National Trade Center

Hitachi Yungtay Elevator Co., Ltd. (formerly Yungtay Engineering Co., Ltd.) was founded in July 1966. For more than 50 years, we have always adhered to the spirit of "always think more for you" and provided customers with the best quality service with a careful and professional attitude and The most appropriate consultation and advice. So far, over 250,000 elevators have been operated worldwide, and it has been awarded the top 500 enterprises of the world magazine.

Looking forward to the future, we will continue to fulfill our consistent commitment to customers, provide high-quality and comprehensive products and complete warranty services, and accelerate research and development to create a win-win future for enterprises and customers.



Kaohsiung - National Kaohsiung Center for the Arts (WeiWuying)



Taichung City - CBD Times Square



Taipai - Breeze Xin Yi

- 03 MRL Intelligent Elevator
- 05 E PASS Smart Safety System
- 06 Energy Efficiency & Preventive Maintenance
- 07 Artificial Intelligence
- 08 Safety
- 09 Security
- 11 Anti-Epidemic Precautionary Elevator
- 12 Smart and Energy-saving Technology
- 13 Car Design
- 19 Ceiling
- 20 Handrail
- 21 Hall Operating Panel
- 22 Anti-epidemic Product & Hall Lantern
- 23 Car Operating Panel
- 24 Materials
- 25 Entrance Design
- 27 Dimensions of Entrance
- 30 MRL Electrical Layout
- 32 Hoistway Layout
- 33 Hoistway Dimension and Reaction Loading
- 35 Functions and Equipment
- 43 Purchase Information & Excluded Constructions
- 44 Related Regulations
- 45 Maintenance Service
- 46 Service Station



MRL Artificial Intelligent Elevator

Innovative Pattern of Whole New Elevator User-Friendly / Safer / Greener



E PASS Artificial Intelligent Elevator

Machine-roomless elevator introduces the E PASS intelligent safety system to provide users with multiple innovative elevator solutions and overall elevator safety.



Anti-Epidemic Precautionary Elevator

Many compartment disinfection technologies and non-contact elevator solutions reduce the risk of germ transmission and provide users with a clean and comfortable elevator environment.



VDI 4707 - Energy Efficient Label for Elevators

Our products have passed the review of the world-renowned certificate authority (TUV Rheinland Group). The entire series of passenger elevators obtain Class A energy efficiency certificates. They were marking that the related products of Yungtay Elevator have reached the advanced international level in energy efficiency.



Advanced Technology, Guaranteed Quality

We have been subsequently certificated by ISO 9001, ISO 14001, ISO 45001, and VDI 4707. As the elevator manufacturer with advanced technology, we can best guarantee our quality.



Reduce noise conduction

The main motor, placed on the top of the guide rail, does not touch the hoistway wall. Therefore, reduce vibration and noise from being transmitted to the inside of the building through the hoistway wall.



Save Construction Cost

The new machine room-less elevator does not need to build the elevator machine room above the hoistway during the installation process, which can effectively improve the installation efficiency, shorten the installation period, and save construction costs.



Improve Space Usage Performance

The new machine room-less elevator does not require planning and design of the machine room in the building, which can effectively improve space use efficiency.



E PASS

Smart Safety System

Keep abreast of the times



ENERGY EFFICIENCY



PREVENTIVE MAINTENANCE



ARTIFICIAL INTELLIGENCE



SAFETY



SECURITY



ENERGY EFFICIENCY

"Destination Dispatch" and "FT3X Group Control" reduce the number of elevator stops, effectively improving the efficiency of elevator operation. Besides, the "Energy Feedback Device" goes back the regenerative power to the building power grid, truly accomplishing "energy saving, environmental protection, and earth love."



Destination Dispatch

Register the destination floor before boarding the elevator, and distribute the passengers to each elevator through AI computing distribution, reduce the number of elevator stops, improve operation efficiency, and shorten the waiting time of passengers. (This function can also link with the access control system)

FT3X Group Control

In each car call from the hall, according to the relative position of each elevator and the registered car-calling signal, calculate the optimal dispatching arrangement, reducing the overall average waiting time and the probability of passengers waiting for a long time.



Energy Feedback Device

The regenerative power generated by the Energy Feedback Device can feed back to the building power grid to supply electricity for the building when the elevator runs in light-load upward or heavy-load downward. In addition, the device can return clean electric energy to achieve green energy-saving benefits.



PREVENTIVE MAINTENANCE

Use the "Internet of Things" to maximize the intelligence of the elevator system through network collection, analysis, and utilization of elevator data. Therefore, achieve elevator status monitoring, remote management, data statistics, fault alarm, maintenance supervision, and emergency response functions.



Internet of Things (IoT)

IoT collects, analyzes, and utilizes elevator data through the network to optimize the intelligent elevator system and achieve the elevator functions of intelligent monitoring, preventive maintenance, and instant rescue.



ARTIFICIAL INTELLIGENCE

Through artificial intelligence calculation and distribution, "Destination Dispatch" and "FT3X Group Control" accurately allocate the elevator service to shorten the waiting and take the time of passengers to use the elevator. In addition, "Face Recognition," "Voice Car Calling," and "Smartphone Car Calling" highly improve the convenience of use.



Face Recognition

After confirming the passenger's identity through the facial recognition system, the right to register the floor is granted, or the system can directly register to the preset destination floor. The system can also combine with the Destination Dispatch system to guide the identified passenger to the designated elevator. (The owner provides the face recognition machine, and Hitachi Yungtay Elevator provides the communication interface)

Voice Car Calling

Passengers can register the destination floor in the car by voice, replacing the traditional touch button, reducing the risk of germ transmission.



Destination Dispatch

Register the destination floor before boarding the elevator, and distribute the passengers to each elevator through AI computing distribution, reduce the number of elevator stops, improve operation efficiency, and shorten the waiting time of passengers. (This function can also link with the access control system)

FT3X Group Control

In each car call from the hall, according to the relative position of each elevator and the registered car-calling signal, calculate the optimal dispatching arrangement, reducing the overall average waiting time and the probability of passengers waiting for a long time.



People Flow Control

The system can automatically detect the number of people waiting in the hall. The intelligent group control dispatching system can flexibly increase the number of service elevators, which can instantly evacuate the crowd and shorten passengers' waiting and boarding time.

Smartphone Car Calling

It uses the APP and BlueTooth from a smartphone or tablet to accurately locate the floor and quickly complete the elevator call and the destination floor registration.



SAFETY

It uses technology invention patents such as "Self-rescue System for Car Slipping" and "Brake Force Detection System" together with safety system devices (unintended car movement protection of the elevator cage, over-speed protection, automatic landing device for power failure, and absolute positioning system) to protect the safety of the ride in all directions.



Self-rescue System while Car Slipping

Safety technology invention patent. The system monitors the car's status when the elevator is in the door-opening zone. If the car is slipping, the computer host automatically outputs the holding torque to keep the car in the door-opening zone, immediately opening the door and reminding passengers to leave the elevator. When the car is vacant, the elevator closes the door and runs to the top floor (the safest position), generating a fault code and stopping service.

Unintended Car Movement Protection (UCMP)

When the elevator door is opened for passengers to enter and exit, the brakes are immediately activated to stop the elevator service once the elevator moves unexpectedly. The elevator will resume regular operation only after maintenance and inspection by professionals.



Ascending Car Overspeed Protection (ACOP)

When the elevator goes up, suppose the speed limiter detects that the up speed exceeds the limit value, it will start the brake to stop the elevator to ensure that it runs safely at the rated speed.



Brake Force Detection System

Safety technology invention patent. The braking force detection of the elevator motor is automatically performed daily on a preset schedule. When the braking force becomes weakened, a warning code will be issued to notify the maintenance personnel to take preventive measures. Furthermore, suppose the braking force is insufficient, the elevator will stop service and generate a fault code for the maintenance personnel to troubleshoot to ensure the brakes' reliability and effectiveness.



Automatic Landing Device for Power Failure (ALP)

In the event of a power failure, the device will replace the regular power supply, and the elevator will automatically move to the nearest floor to allow passengers to exit the car safely, thereby avoiding the situation where passengers are locked in the elevator during a power failure.



Absolute Positioning System (APS)

The sensor above the elevator car reads the tape installed in the hoistway in a non-contact way to detect the current absolute position of the car. Avoid measurement errors caused by rope slippage or dynamic rope effects; even unfavorable environmental conditions (such as thick black smoke) do not affect the measurement results. In addition, it can increase the functions of upstream and downstream overspeed protection and check end-stage deceleration, greatly improving safety.





SECURITY

The "Security Mode" strengthens daily safety precautions and prevents crimes; when an emergency occurs, the "Car Monitoring" proactively reports to the outside world that passengers fall over or are inactive, minimizing the damage in the event of an accident. In addition, antibacterial disinfection technologies such as "Positive and Negative Ions Air Purifier" and "Non-Contact Button" can double protect passengers' health.



Face Recognition

After confirming the passenger's identity through the facial recognition system, the right to register the floor is granted, or the system can directly register to the preset destination floor. The system can also combine with the Destination Dispatch system to guide the identified passenger to the designated elevator. (The owner provides the face recognition machine, and Hitachi Yungtay Elevator provides the communication interface)

Internet of Things (IoT)

IoT collects, analyzes, and utilizes elevator data through the network to optimize the intelligent elevator system and achieve the elevator functions of intelligent monitoring, preventive maintenance, and instant rescue.



Central Monitoring System (YECM)

The YECM system transmits the elevator operation signal in the operation panel to the monitoring computer through digital communication. The administrator can monitor the running status of the elevator, set the running mode, issue control commands, perform statistical analysis of the elevator operation, make reservations, and record the faults of the elevator.

Smartphone Car-Calling

It uses the APP and BlueTooth from a smartphone or tablet to accurately locate the floor and quickly complete the elevator call and the destination floor registration.



Security Mode

When there is an intruder in the home, the user can enter the password through the floor button on the car control panel so that the elevator will move to the non-leveling floor and stand by, and the lighting and fans will continue to run. At this time, the system will automatically notify the service center through the IoT function, making the elevator a safe refuge.

Car Monitoring

The car monitoring device can automatically detect the situation in the car. For example, suppose the passenger falls over or cannot move; the elevator will automatically run to the lobby floor to open the door, sound an alarm, and notify the service center through the IoT function to minimize the damage of an accident.



Car Disinfection

"Positive and Negative Ions Air Purifier," "Antibacterial Handrail," and "UV Germicidal Lamp" provide clean space for the elevator and additional protection for the health of passengers.



Non-Contact Button

When moving the finger toward the button within 1 cm, passengers can trigger the button signal to call a car by induction. As a result, passengers do not need to press buttons directly, reducing the risk of germ infection.



Emergency Visible System

When an emergency occurs in the car, passengers can press the emergency video intercom button on the car's control panel to communicate with the outside. People outside the car can also know the situation in the car in real-time through the visual system to ensure the safety of passengers.



Elevator Multimedia System (OPYM4)

It can display the dynamic position of the elevator and import information such as weather conditions or financial stock markets through the Internet. In addition, it provides passengers with real-time and valuable information and can provide functions such as audio and video advertisements and electronic announcements.

Anti-epidemic Precautionary Elevator

Multiple Sterilization and Disinfection Technology

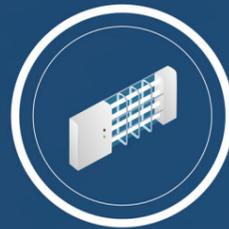
SHARP Professional Medical Plasmacluster Air Purifiers

The only air cleaner that simultaneously releases a large number of H+ (positive) and O2- (negative) ions, fighting off bacteria actively and comprehensively.



Nano-Photocatalyst Air Purifier

Nano-photocatalyst technology purifying the air. Air purification and sterilization efficiency, more than 90%, PM 2.5 purification efficiency, more than 95%.



UV Germicidal Lamp

Disinfection and sterilization efficiency achieves 99%. By induction protection device, when someone is sensed, UV disinfection will stopped immediately.



Antibacterial Handrail

The wooden surface of the handrail of the car is added with the antibacterial and anti-mildew coating to form an antibacterial protective layer. When germs contact the surface of the handrail, the antibacterial coating will inhibit the activity of germs.

Non-Contact Solution

Passengers do not need to press any elevator button, and therefore they avoid cross infection and ensure a safe ride.



Non-Contact Button

When moving the finger toward the button within 1 cm, passengers can trigger the button signal to call a car by induction. As a result, passengers do not need to press buttons directly, reducing the risk of germ infection.



Voice Car-Calling

No hand, no contact! Just name the floor you want. Reduce the chance of infection.



Gesture Car-Calling

Simply wave your hand up and down in the elevator hall to call the car. Not only bettering experience with elevator rides but also eliminating contact with germs on the buttons to protect the health of passengers.



Infrared Light Curtain

The elevator will promptly detect any people or objects blocking the infrared light curtain and reopen the door during the closing process. Improve riding safety, and have a non-contact epidemic prevention effect.

Smart and Energy-saving Innovative Technology

Features of Gearless PM Motor Traction Machine

- Traction machine with higher transmission efficiency and lighter weight that can reduce electricity consumption to save energy as well as lower carbon emission.
- Gearless structure eliminates the noise by occlusion of gear wheels. As a result, there is no need to use gear oil for lubrication.
- Dual brakes.
- Winding Self-Interlock Device: Even if the brake fails, the elevator will only slowly slide down until the buffer is compressed, and then the slide halts; no severe damage will incur due to uncontrollable collision.



Lower Noise



Higher Torque



Lower Electromagnetic Interference



Lighter Weight Smaller Volume



Higher Electrical Efficiency



Higher Structural Strength

PM Direct Drive Synchronous Door System

The smart PM motor is higher efficient and lower noisy, possessing the technologies of motor parameters and magnetic pole self-learning. The end of the car door closing will be smoother, faster, steadier, and quieter.

High Efficient Energy Feedback Device (OPTION)

Using the energy feedback device, the regenerative power generated by the traction motor is able to feed back to the electrical network for reuse, obtaining the highest 5A level certification of the European Union's new elevator green energy-saving efficiency seal "VDI 4707"



Green Advanced LED

Highly efficient LED is comprehensively applied: low-frequency flash, high electrical efficiency, mercury pollution-free, and long service life, accomplishing the home of full evolution.

At most approximately 40% of the electricity can be saved by the Energy Feedback Device.

PERMANENT MAGNET

In an age of shorter resources, Hitachi Yungtay Elevator devotes to realizing green technology, fully adopting the elevator with permanent-magnet (PM) gearless traction machine.





ELEVATOR

IDEAL FOR THE NEW CENTURY

New machine-roomless elevators effectively reduce the space used by mechanical equipment, reduce elevator operating noise, and enhance passengers' comfortable riding experience.

Car Design - CH5

Modern Aesthetics

Modest Temperament · Elegant in Good Taste

Ceiling

- Main Frame Steel Plate with Baked Painting (J147)
- Middle Plate Spherical Creamy White Acrylic
- Side Plates Milky White Acrylic Plate
- Lighting White LED Lighting

Floor

NPC Floor Tile : (505)



Wall Panels

- Car Door Steel Plate with Colored Pattern (A111)
- Front Wall Stainless Steel Plate with Hairline Finished
- Side Wall Steel Plate with Colored Pattern
Left / Right Plate - (C114); Middle Plate - (A111)
C114 single-colored sidewall is for the elevator with a capacity of 9 passengers at most
- Rear Wall Steel Plate with Colored Pattern
Left / Right Plate - (C114); Middle Plate - (A111)



Car Design - CH10

Future Image

Simplicity Characteristics · Bold and Advanced

Ceiling

Main Frame Steel Plate with Baked Painting (J161)
 Left/Right Steel Plate with Baked Painting (1-30)
 Lining White Wood Grating and Rice Paper Acrylic
 Lighting Warm LED Lighting

Floor

NPC Floor Tile : (531)
 Frame : (536)



Wall Panels

Car Door Steel Plate with Colored Pattern (1072)
 Front Wall Stainless Steel Plate with Hairline Finished
 Side Wall Steel Plate with Colored Pattern (1072)
 Rear Wall Steel Plate with Colored Pattern (1072)
 + Mirror Plate Stainless Steel
 Decorative Strip



Car Design - CH12

European Classic

Silent Steady · Eternal Nobility

Ceiling

Main Frame Steel Plate with Baked Painting (1-51)
 Matching with Milky White Acrylic Plate
 Lighting Warm LED Lighting

Floor

Faux Stone Floor Tile : (8T7)
 Frame : (8T0)



Wall Panels

Car Door Steel Plate with Colored Pattern (A111)
 Front Wall Stainless Steel Plate with Hairline Finished
 Side Wall Steel Plate with Colored Pattern
 Left / Right Plate - (SNW-9); Middle Plate - (A111)
 SNW-9 single-colored sidewall is for the elevator
 with a capacity of 9 passengers at most
 Rear Wall Steel Plate with Colored Pattern
 Left / Right Plate - (SNW-9); Middle Plate - (A111)
 + Mirror Plate Stainless Steel Decorative Strip



Car Design - CH18

Delicate Paragon

Steady Magnitude · Prime Honor

Ceiling

Main Frame Steel Plate with Baked Painting (1-51)
 Matching with Milky White Acrylic Plate
 3 partitions Inside Width > 1100mm
 1 piece Inside Width \geq 1100mm
 Lighting Warm LED Lighting

Floor

NPC Floor Tile : (531)
 Frame : (536)



Wall Panels

Car Door Steel Plate with Colored Pattern (SNW-1)
 Front Wall Stainless Steel Plate with Hairline Finished
 Side Wall Steel Plate with Colored Pattern
 Left / Right Plate - (SNA-7); Middle Plate - (SNW-1)
 SNA-7 single-colored sidewall is for the elevator with a capacity of 9 passengers at most
 Rear Wall Steel Plate with Colored Pattern
 Left / Right Plate - (SNA-7); Middle Plate - (SNW-1)
 + Mirror Plate Stainless Steel Decorative Strip



Car Design - H2

Classical Collection

Character Extraordinary · Gradation Apparent

Ceiling

Main Frame Steel Plate with Baked Painting (1-51)
 Matching with Creamy White Acrylic
 5 partitions Inside Width \geq 1400mm
 3 partitions Inside Width < 1400mm
 Lighting Warm LED Lighting

Floor

Wood Grain Floor Tile : (8TF)
 Frame : (8TE)



Wall Panels

Car Door Steel Plate with Colored Pattern (A111)
 Front Wall Stainless Steel Plate with Hairline Finished
 Side Wall Steel Plate with Colored Pattern (A111)
 Rear Wall Steel Plate with Colored Pattern (A111)
 + Decorative Strip (SNW-9)



Ceiling



CH5
 Main Frame Steel Plate with Baked Painting (J147)
 Middle Plate Spherical Creamy White Acrylic
 Side Plates Milky White Acrylic Plate
 Lighting Warm LED Lighting



CH12
 Main Frame Steel Plate with Baked Painting (1-51)
 Matching with Milky White Acrylic Plate
 Lighting Warm LED Lighting



CH10
 Main Frame Steel Plate with Baked Painting (J161)
 Left/Right Steel Plate with Baked Painting (1-30)
 Lining White Wood Grating and Rice Paper Acrylic
 Lighting Warm LED Lighting



CH18
 Main Frame Steel Plate with Baked Painting (1-51)
 Matching with Milky White Acrylic Plate
 3 partitions Inside Width > 1100mm
 1 piece Inside Width \geq 1100mm
 Lighting Warm LED Lighting



VIP01 **Option**
 Main Frame Titanium Steel Plate (TK-ED-011)
 Mirror Brown Anti-Fingerprint Plated
 Titanium Steel Plate
 Inner Side Milky White Acrylic Plate
 Outer Side Transparent Acrylic Decorative Strip
 Lighting White LED Lighting



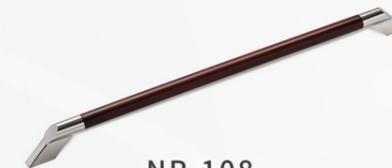
A2 **Option**
 Main Frame Titanium Steel Plate (TK-ED-003)
 Mirror Black Anti-Fingerprint Plated
 Titanium Steel Plate
 Central light source covered with mirror-polished stainless steel panels with holes
 Light Energy-saving Warm LED Lighting
 Size Limits Inside Width \geq 1300mm
 Inside Depth \geq 1250mm



H2
 Main Frame Steel Plate with Baked Painting (1-51)
 Matching with Creamy White Acrylic
 5 partitions Inside Width \geq 1400mm
 3 partitions Inside Width < 1400mm
 Lighting Warm LED Lighting

Handrail

Matching with diverse styles and tastes of different constructions
 A brand-new visual feast with an ingenious touch



NR-108
 Stainless Steel inlaid with Solid Wood (imitation walnut)
 Diameter : 38mm Φ
 Optional for Antibacterial Material



NR-113
 Stainless Steel inlaid with Hairline Stainless Steel
 Diameter : 38mm Φ



NR-112
 Stainless Steel inlaid with Solid Wood (imitation sen)
 Diameter : 38mm Φ
 Optional for Antibacterial Material



NR-6
 Mirror Finished Stainless Steel
 Diameter : 38mm Φ



NR-125
 Stainless Steel inlaid with Genuine Leather
 Diameter : 38mm Φ

Hall Operating Panel

FOX Series

Ultra-Thin Hall Indicator, Breathing Light with Rhythmic Flash. Extreme Slim and Thin, Extreme Exquisiteness.

Operating Panel



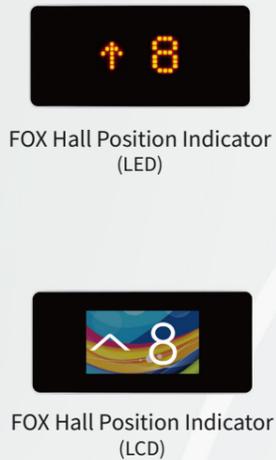
For Wheelchair Use

Option



Indicator

Option



YT Series

Option

The design is sharp and straightforward, focusing on the texture as well as pursuing the quality.

Operating Panel



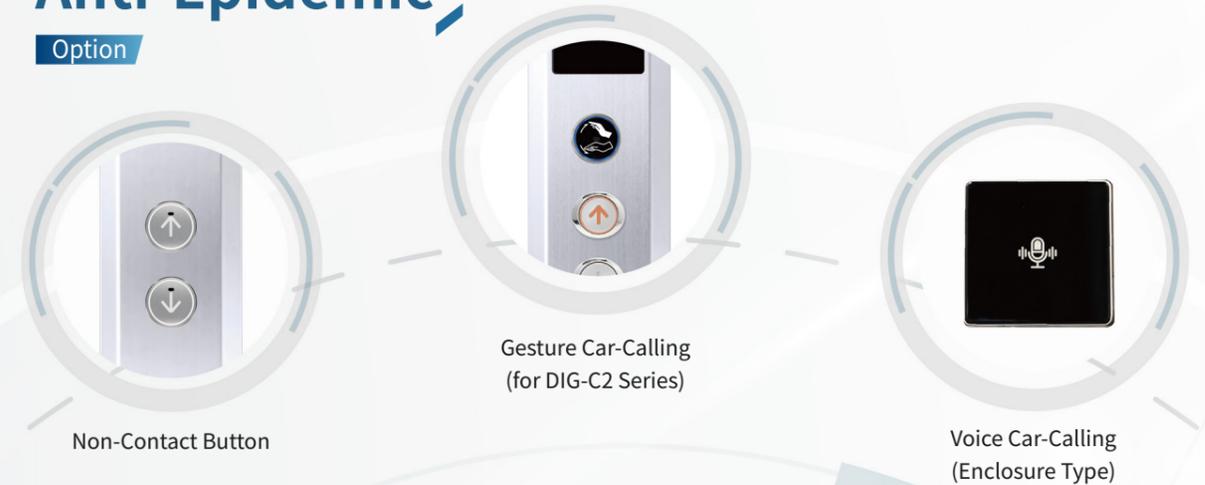
For Wheelchair Use

Indicator



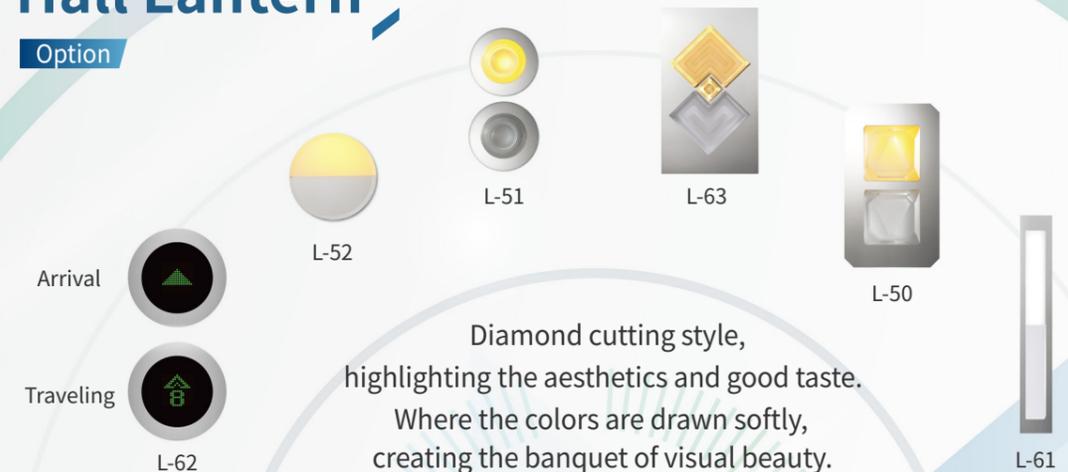
Anti-Epidemic

Option



Hall Lantern

Option



Diamond cutting style, highlighting the aesthetics and good taste. Where the colors are drawn softly, creating the banquet of visual beauty.

Car Operating Panel

FOX Series

Innovative Embedded Breathing Light Design with Rhythmic Flash.



FOX OPB (LCD)
Rotational Operating Panel
(RETURN-PANEL)
Option

YT Series

Stainless Steel Material Qualities
Solid, Aesthetic and Practical.

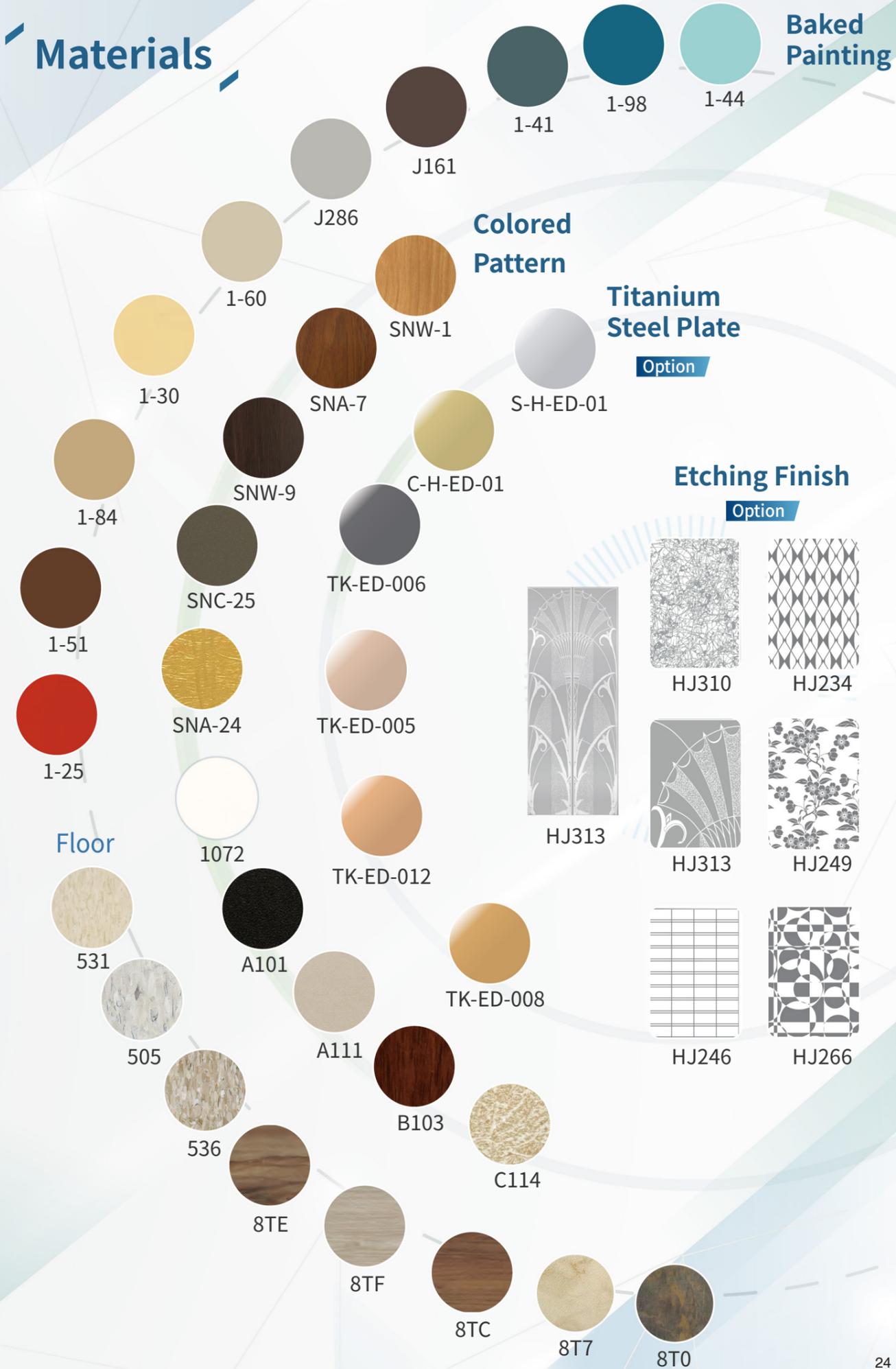


OPY-HD2F
Rotational Operating Panel
(RETURN-PANEL)
(Elevator loading over
17 people or more)
Option



W.FOX OPB
Option

Materials



Entrance Design



Door Panel Steel Plate with Colored Pattern (A111)

Hall IND FOX LED

Jamb Frame Narrow Type
Stainless Steel with Hairline Finish

Sill Extruded hard aluminum

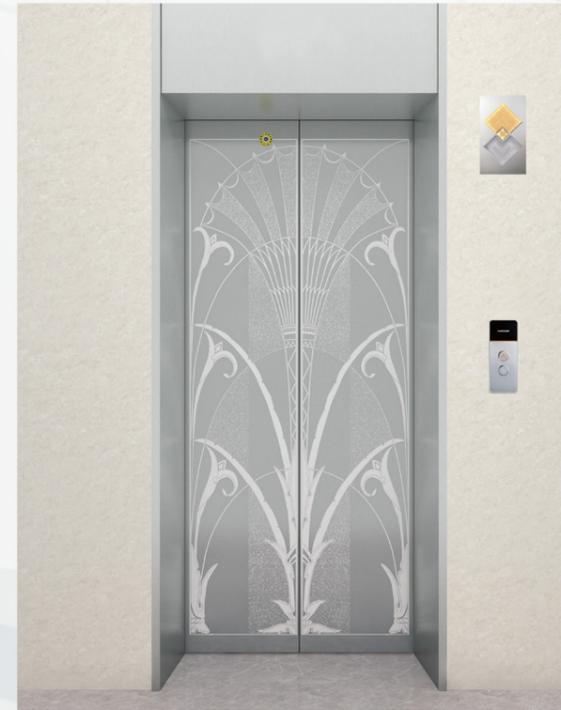


Door Panel Center-opening Doors
Stainless Steel with Hairline Finish **Option**

Hall IND FOX LCD **Option**

Jamb Frame Narrow Type
Transom Attached **Option**
Stainless Steel with Hairline Finish

Sill Extruded hard aluminum



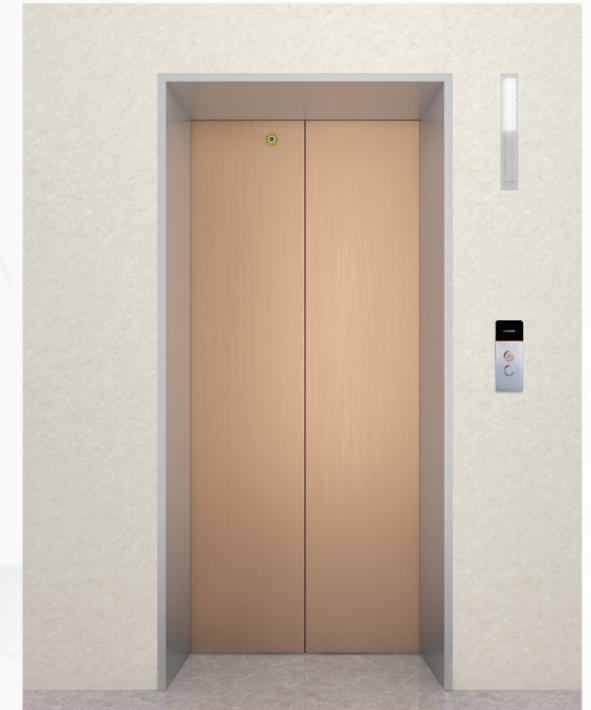
Door Panel Center-opening Doors
Stainless Steel with **Option**
Hairline Etching Finish (HJ-313)

Hall IND FOX BL **Option**

Jamb Frame Wide Type **Option**
Transom Attached **Option**
Stainless Steel with Hairline Finish

Sill Extruded hard aluminum

Light L-63 **Option**



Door Panel Center-opening Doors
Titanium Steel Plate **Option**
with Hairline Finish (TK-ED-012)

Hall IND FOX BL **Option**

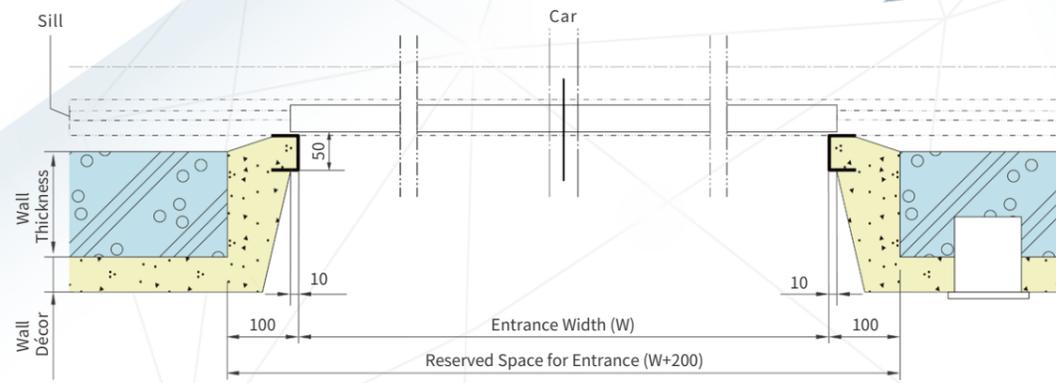
Jamb Frame Wide Type **Option**
Stainless Steel with Hairline Finish

Sill Extruded hard aluminum

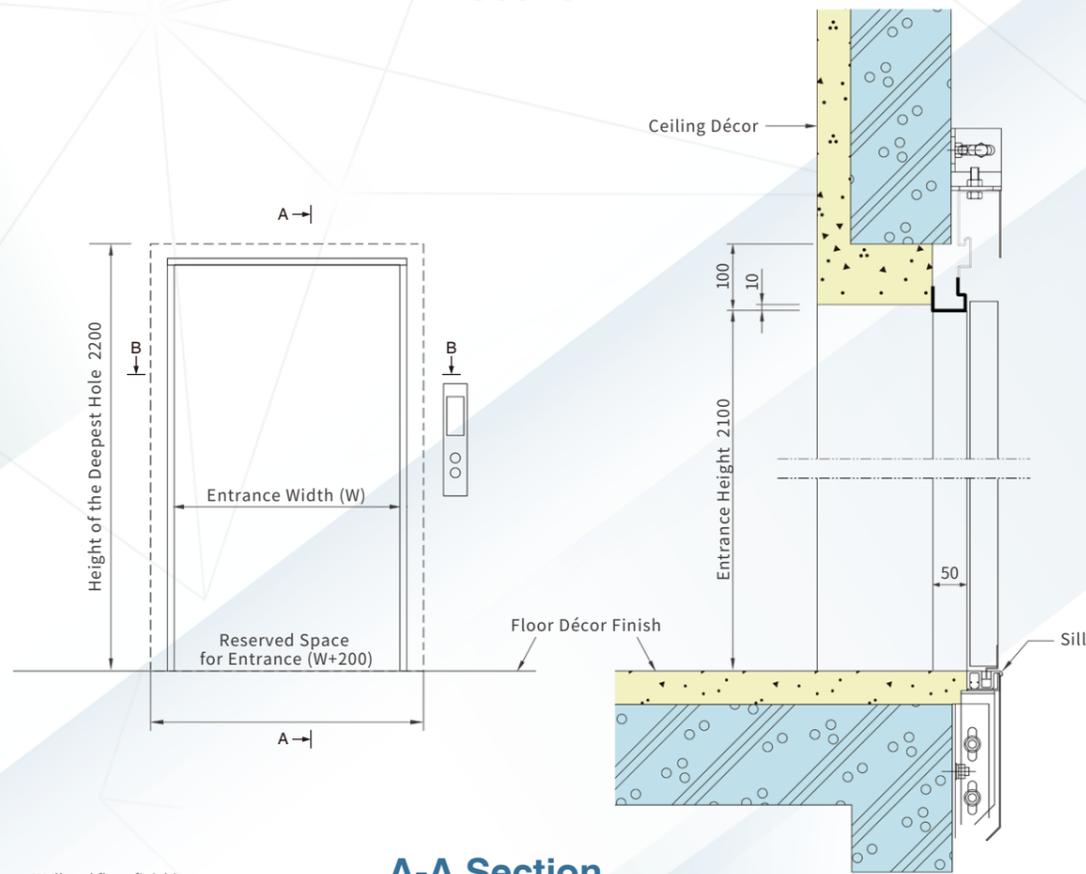
Light L-61 **Option**

Dimensions of Entrance

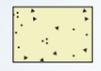
Narrow-Type



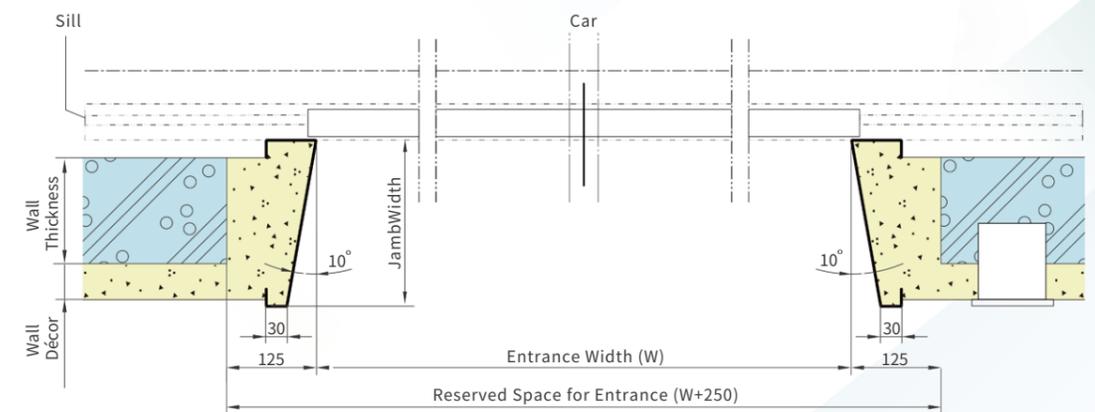
B-B Section



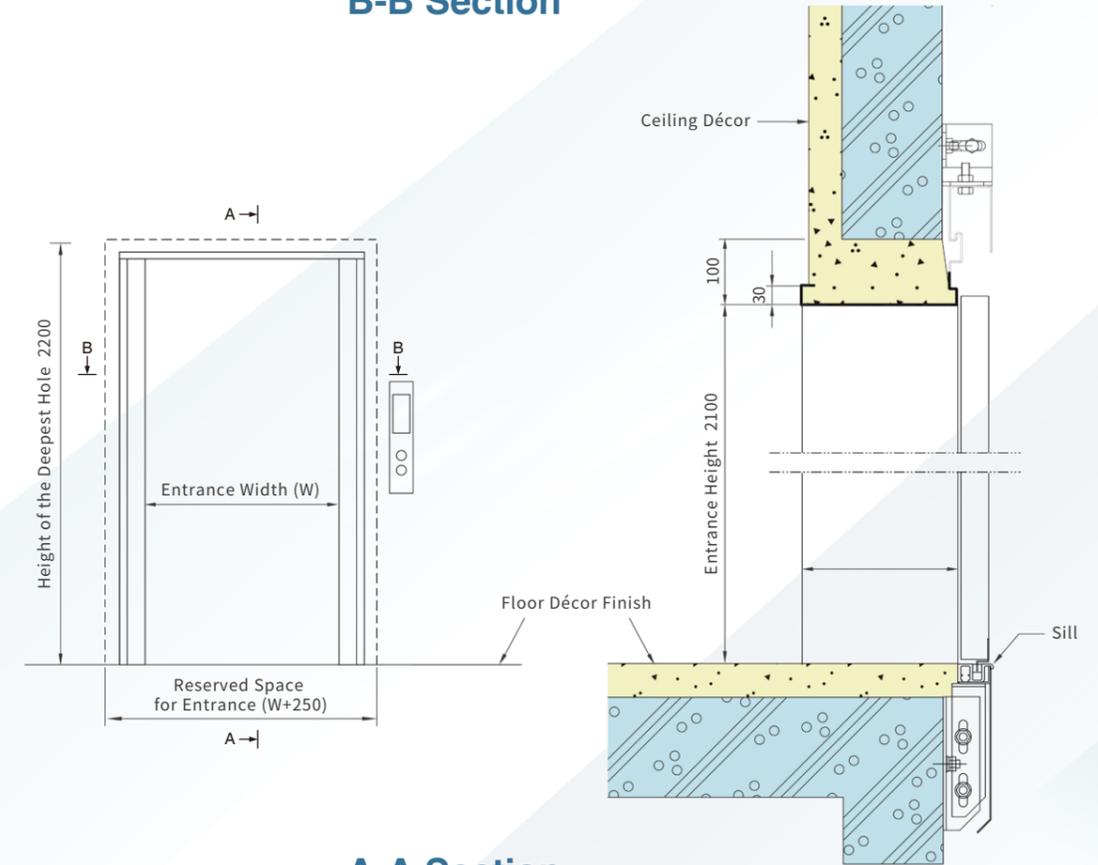
A-A Section

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

Wide-Oblique Optional

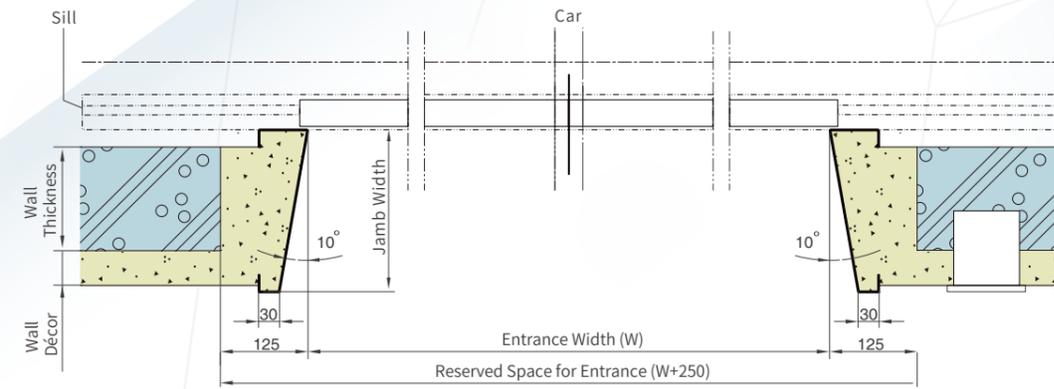


B-B Section

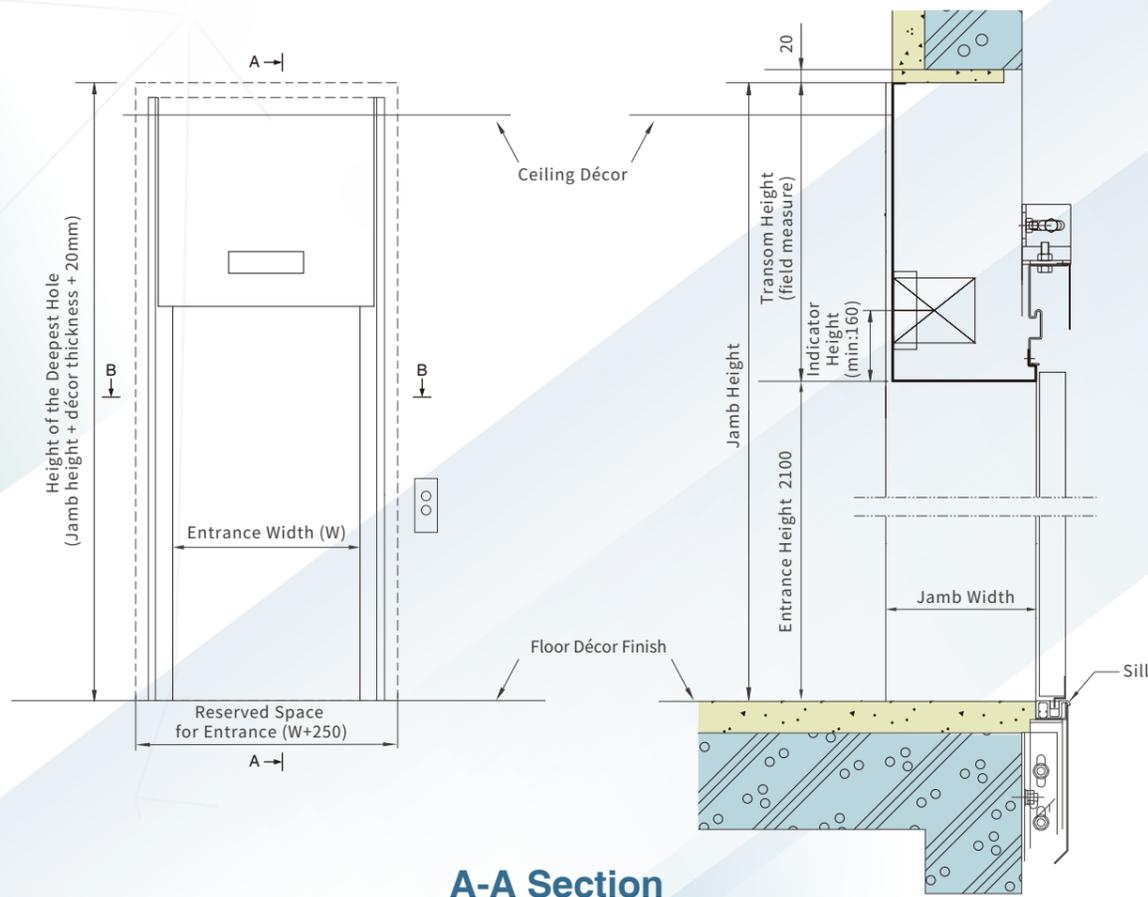


A-A Section

Wide Type - with Transom Optional



B-B Section

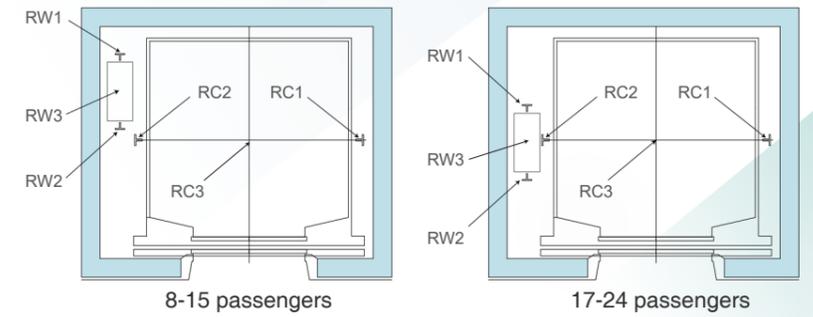


A-A Section

Note :

1. If the transom is attached with a floor indicator, the minimum jamb height should be above 2450mm.
2. The height of the jamb is limited by the material, up to 3000mm.
3. The hole size for the hall indicators depends on the type of indicator.

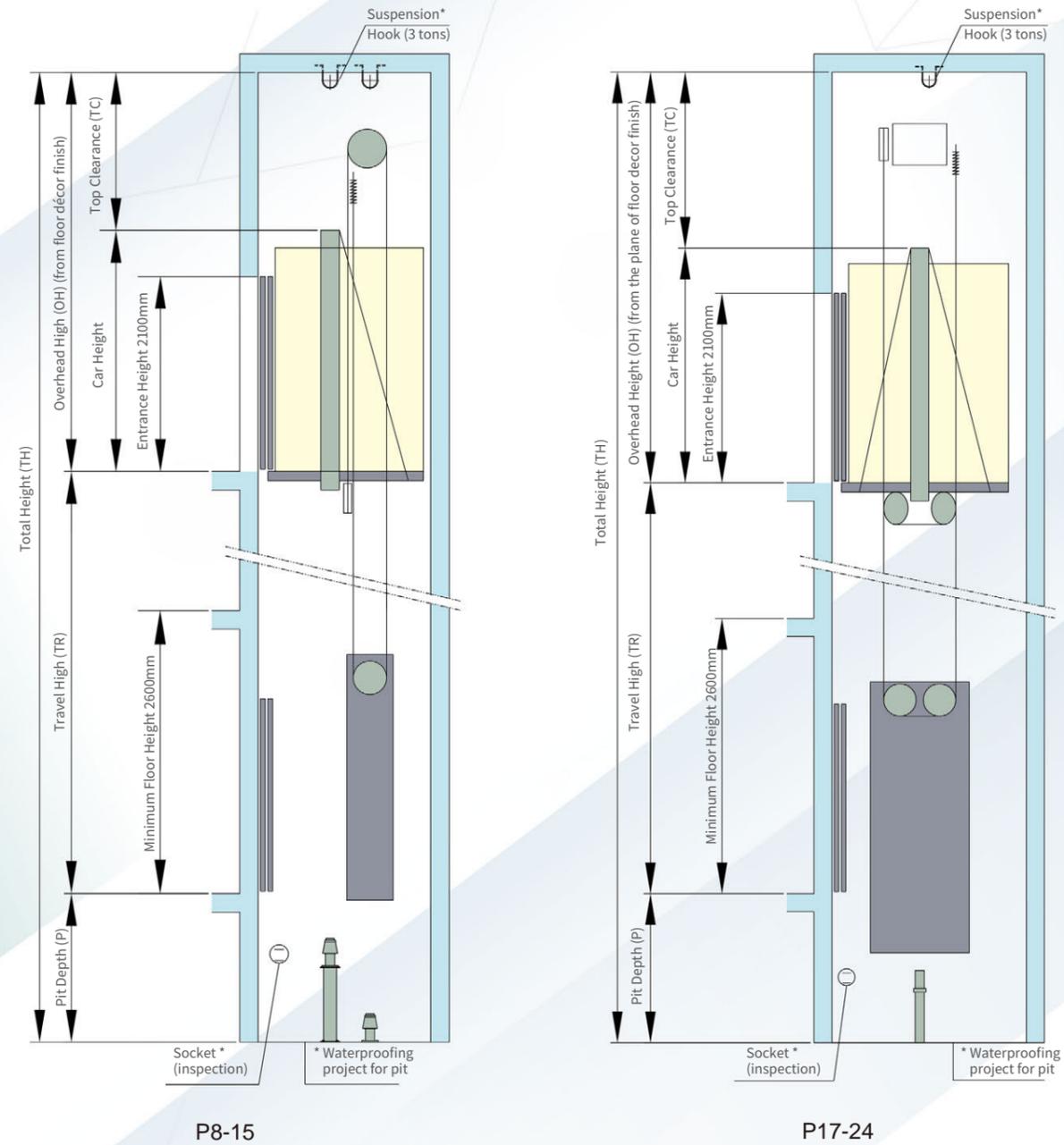
Machine Room-Less Electrical Layout



Structural Load of Bottom of Machine-Room-Less RAIL The counterweight (KG) of the rail bottom are as follows:

Passenger	Rated Speed (m/min)	Car Side			CWT Side				
		RC1(KG)	RC2(KG)	RC3(KG)	RW1(KG)	RW2(KG)	RW3(KG)		
8 (550)	45			6000			5100		
	60			7800			6600		
	90	2800	2800	7300	4500	4500	6200		
	105			8500			7300		
9 (600)	45			6200			5200		
	60			8000			6800		
	90	2900	2900	7500	4600	4600	6300		
	105			8800			7400		
10 (700)	45			6700			5500		
	60			8700			7200		
	90	3000	3000	8100	4800	4800	6700		
	105			9500			7900		
11 (750)	45			6900			5700		
	60			8900			7300		
	90	3100	3100	8300	4900	4900	6800		
	105			9800			8100		
12 (800)	45			7100			5800		
	60			9200			7500		
	90	3100	3100	8600	5000	5000	7000		
	105			10100			8300		
13 (900)	45			7600			6100		
	60			9800			7900		
	90	3300	3300	9200	5200	5200	7400		
	105			10800			8700		
15 (1000)	45			8100			6500		
	60			10500			8400		
	90	3400	3400	9800	5400	5400	7800		
	105			11500			9200		
17 (1150)	60			14800			13400		
	90			13700			12000		
	105	5800	5800	16100	6200	6200	14100		
	120			15900			14000		
20 (1350)	60			6100	6100	16000	6500	6500	14300
	90			6100	6100	14900	6500	6500	12800
	105			6200	6200	17500	6700	6700	15000
	120			6200	6200	17300	6700	6700	15000
24 (1600)	60			17500			15300		
	90			16200			13700		
	105	6600	6600	19100	7000	7000	16100		
	120			18900			16000		

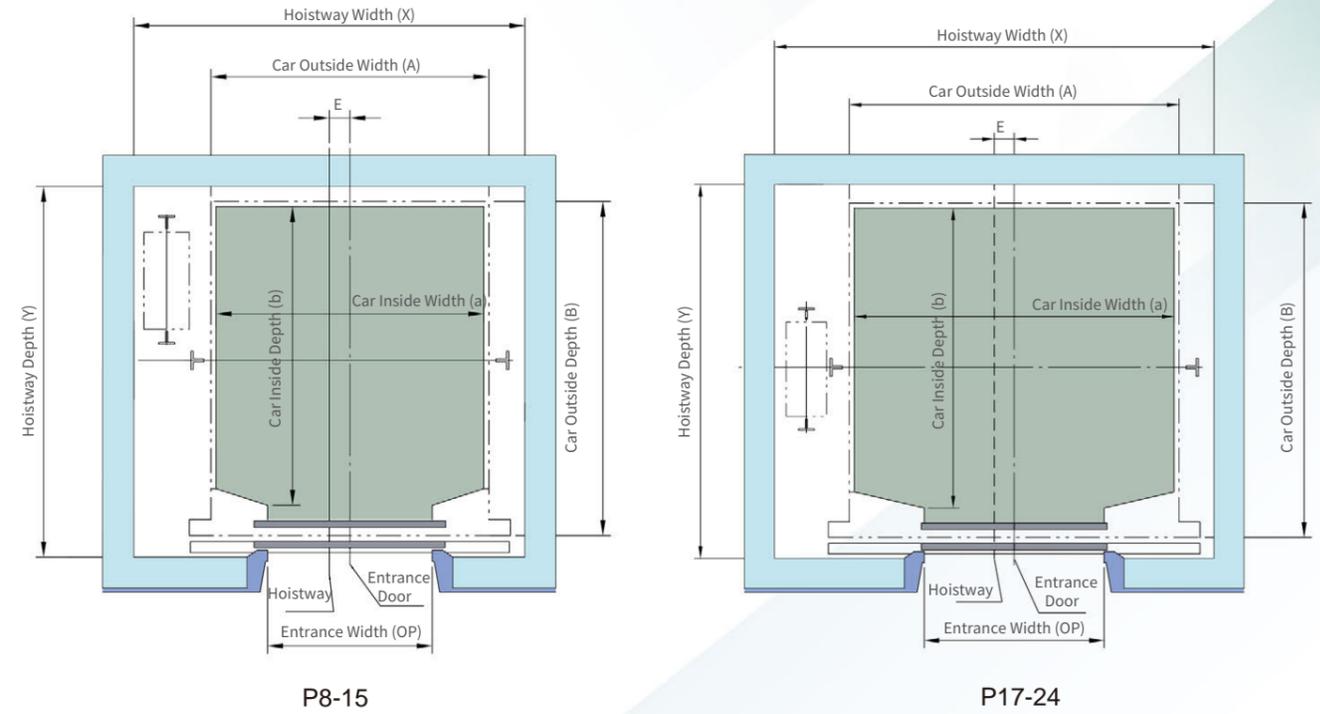
Hoistway Dimension



		unit : mm			
Number of Persons	Rated Speed (m/min)	Items			
		45	60	90	105
P8-15	Overhead High (OH)	4300	4300	4550	4700
	Pit Depth (P)	1600	1600	1850	2150
P17-24	Overhead High (OH)	4450	4450	4650	4850
	Pit Depth (P)	1650	1650	1850	2150

Note:
 1. If the dimensions do not match with each other, please contact our Sales Department.
 2. The dimensions listed above do not include the décor finish.

Hoistway Layout



Unit : mm									
Dimension	a	A	b	B	OP	X	Y	E	Notes
8(550)	1100	1150	1350	1525	800	1850	1720	15	2P-CO
9(600)	1100	1150	1400	1575	800	1850	1770	15	2P-CO
10(700)	1300	1350	1350	1525	800	1950	1720	65	2P-CO
11(750)	1300	1350	1400	1575	800	1950	1770	65	2P-CO
12(800)	1300	1350	1500	1675	800	1950	1870	65	2P-CO
13(900)	1500	1550	1450	1625	900	2150	1820	65	2P-CO
15(1000)	1600	1650	1500	1675	900	2250	1870	65	2P-CO
17(1150)	1600	1650	1650	1815	1000	2680	2070	105	2P-CO
20(1350)	1800	1850	1700	1865	1000	2780	2120	155	2P-CO
24(1600)	2000	2050	1750	1915	1100	2980	2170	155	2P-CO

Note:
 1. The hoistway dimensions (X, Y) are the last ones of construction finish but not include the vertical error of construction.
 2. If the stroke is over 30M, the hoistway dimensions (X, Y) should be added by 50mm, respectively.
 3. The specifications defined in this catalog are only for reference. If you need to specify the buildings, please contact our Sales Department.

Electrical Layout

1. Lighting Equipment: AC1Φ, 110V, 15A power supply for car lighting, maintenance, and inspection lighting.
2. Power Supply: AC3 Φ, 380V, 60Hz

Load Capacity KG (person)	Rated Speed (m/min)	Motor Capacity (KW)	Transformer Capacity of Construction (KW)	FFB Capacity of Construction (A)	Cables for Power Supply										Minimum Ground Wire Size
					Maximum Cable Length (m) by Cable Diameter										
					5.5 (mm ²)	8 (mm ²)	14 (mm ²)	22 (mm ²)	38 (mm ²)	60 (mm ²)	100 (mm ²)	150 (mm ²)	200 (mm ²)		
8 (550)	45	2.6	4	30	70	101	172	260	426	618	902	1172	1416	2	
	60	3.5	4	40	58	83	142	215	352	510	745	968	1169	3.5	
	90	5.1	6	40	42	61	104	157	257	373	545	708	855	3.5	
	105	6	6	50	38	54	92	139	228	331	483	628	758	3.5	
9 (600)	45	2.8	4	30	70	101	172	260	426	618	902	1172	1416	2	
	60	3.7	4	40	58	83	142	215	352	510	745	968	1169	3.5	
	90	5.6	6	40	42	61	104	157	257	373	545	708	855	3.5	
	105	6.5	6	50	38	54	92	139	228	331	483	628	758	3.5	
10 (700)	45	3.2	4	30	60	87	148	223	366	531	775	1007	1216	2	
	60	4.2	5	40	49	71	121	183	300	435	634	824	996	3.5	
	90	6.3	6	50	-	-	88	132	217	315	460	598	722	3.5	
	105	7.3	7	50	-	-	77	116	190	275	402	523	631	3.5	
11 (750)	45	3.5	4	30	60	87	148	223	366	531	775	1007	1216	2	
	60	4.6	5	40	49	71	121	183	300	435	634	824	996	3.5	
	90	6.9	6	50	-	-	88	132	217	315	460	598	722	3.5	
	105	8.1	7	50	-	-	77	116	190	275	402	523	631	3.5	
12 (800)	45	3.9	5	40	53	76	130	196	321	465	679	883	1066	3.5	
	60	5.2	6	40	42	61	104	157	257	373	545	708	855	3.5	
	90	7.6	7	50	-	-	75	113	186	270	394	512	618	3.5	
	105	8.9	8	60	-	-	65	99	163	236	344	448	541	5.5	
13 (900)	45	4.2	5	40	53	76	130	196	321	465	679	883	1066	3.5	
	60	5.6	6	40	42	61	104	157	257	373	545	708	855	3.5	
	90	8.3	7	50	-	-	75	113	186	270	394	512	618	3.5	
	105	9.7	8	60	-	-	65	99	163	236	344	448	541	5.5	
15 (1000)	45	4.7	5	40	49	71	121	183	300	435	634	824	996	3.5	
	60	6.2	6	40	39	56	96	145	237	344	502	652	788	3.5	
	90	9.4	8	50	-	-	69	104	170	247	361	469	566	3.5	
	105	11	9	60	-	-	59	89	146	211	308	401	484	5.5	

1. Lighting Equipment: AC1Φ, 110V, 15A power supply for car lighting, maintenance, and inspection lighting.
2. Power Supply: AC3 Φ, 220V, 60Hz

Load Capacity KG (person)	Rated Speed (m/min)	Motor Capacity (KW)	Transformer Capacity of Construction (KW)	FFB Capacity of Construction (A)	Cables for Power Supply										Minimum Ground Wire Size
					Maximum Cable Length (m) by Cable Diameter										
					5.5 (mm ²)	8 (mm ²)	14 (mm ²)	22 (mm ²)	38 (mm ²)	60 (mm ²)	100 (mm ²)	150 (mm ²)	200 (mm ²)		
8 (550)	45	2.6	4	20	283	406	690	1042	1707	2474	3610	4690	5665	2	
	60	3.5	4	20	234	335	570	860	1410	2043	2981	3874	4678	2	
	90	5.1	6	20	171	245	417	629	1031	1494	2180	2832	3421	2	
	105	6	6	30	152	217	369	558	914	1325	1933	2512	3034	2	
9 (600)	45	2.8	4	20	283	406	690	1042	1707	2474	3610	4690	5665	2	
	60	3.7	4	20	234	335	570	860	1410	2043	2981	3874	4678	2	
	90	5.6	6	20	171	245	417	629	1031	1494	2180	2832	3421	2	
	105	6.5	6	30	152	217	369	558	914	1325	1933	2512	3034	2	
10 (700)	45	3.2	4	20	243	349	593	895	1467	2126	3101	4029	4867	2	
	60	4.2	5	20	199	286	485	733	1201	1740	2539	3299	3985	2	
	90	6.3	6	30	144	207	352	531	871	1262	1841	2392	2889	2	
	105	7.3	7	30	126	181	308	465	761	1103	1610	2092	2527	2	
11 (750)	45	3.5	4	20	243	349	593	895	1467	2126	3101	4029	4867	2	
	60	4.6	5	20	199	286	485	733	1201	1740	2539	3299	3985	2	
	90	6.9	6	30	144	207	352	531	871	1262	1841	2392	2889	2	
	105	8.1	7	50	126	181	308	465	761	1103	1610	2092	2527	2	
12 (800)	45	3.9	5	20	213	306	520	784	1285	1863	2718	3532	4266	2	
	60	5.2	6	20	171	245	417	629	1031	1494	2180	2832	3421	2	
	90	7.6	7	30	124	177	301	455	746	1081	1577	2049	2475	2	
	105	8.9	8	40	108	155	263	398	652	945	1379	1792	2165	3.5	
13 (900)	45	4.2	5	20	213	306	520	784	1285	1863	2718	3532	4266	2	
	60	5.6	6	20	171	245	417	629	1031	1494	2180	2832	3421	2	
	90	8.3	7	30	124	177	301	455	746	1081	1577	2049	2475	2	
	105	9.7	8	40	108	155	263	398	652	945	1379	1792	2165	3.5	
15 (1000)	45	4.7	5	20	199	286	485	733	1201	1740	2539	3299	3985	2	
	60	6.2	6	30	158	226	384	580	950	1377	2009	2611	3153	2	
	90	9.4	8	40	113	162	276	417	683	990	1444	1876	2266	3.5	
	105	11	9	40	97	139	236	356	584	847	1235	1605	1939	3.5	
17 (1150)	60	7.8	7	30	124	177	301	455	746	1081	1577	2049	2475	2	
	90	11.6	10	40	97	139	236	356	584	847	1235	1605	1939	3.5	
	105	13.6	11	50	-	-	118	178	291	423	617	802	968	5.5	
	20 (1350)	60	8.9	8	40	108	155	263	398	652	945	1379	1792	2165	3.5
90		13.3	11	50	-	-	118	178	291	423	617	802	968	5.5	
105		15.6	14	50	-	-	118	178	291	423	617	802	968	5.5	
24 (1600)		60	10.3	9	40	97	139	236	356	584	847	1235	1605	1939	3.5
	90	15.5	12	50	-	-	118	178	291	423	617	802	968	5.5	
	105	18	15	75	-	-	101	152	249	362	528	728	828	5.5	

Functions and Equipment

Energy Efficiency

Standard

Car Call Cancellation	Deregister a mistaken floor by pressing the same floor button twice within 3 seconds.
Nuisance Call Cancellation	When the car is vacant, but multiple floor buttons on the operation panel are still registered with signals, the microcomputer system will automatically detect this abnormal state and cancel the registered to save energy.
Car Call Cancellation at Reversal	When the elevator changes direction, the system will cancel the previously registered floor, which can avoid invalid stops and save electricity.
LED Lighting	Greenlight sources with high efficiency, energy saving, environmental protection, low carbon emission, safety, and durability are applied to replace traditional lighting to save energy consumption.
Energy Saving for Floor Indicator	The floor displayer's brightness will decrease to one-third of the regular level to reduce energy consumption when the elevator has been idle for a while.
Energy Saving Function	The car lighting and fans will stop running to save energy when the car is vacant for a while and will restart running if there is any calling from other floors.

Optional

Destination Dispatch	Register the destination floor before boarding the elevator, and distribute the passengers to each elevator through AI computing distribution, reduce the number of elevator stops, improve operation efficiency, and shorten the waiting time of passengers. (This function can also link with the access control system)
Duplex Selective Collective Operation	Two elevators can be linked for the group control operation.
FT3X Group Control	In each car call from the hall, according to the relative position of each elevator and the registered car-calling signal, calculate the optimal dispatching arrangement, reducing the overall average waiting time and the probability of passengers waiting for a long time.
Energy Feedback Device	The regenerative power generated by the Energy Feedback Device can feed back to the building power grid to supply electricity for the building when the elevator runs in light-load upward or heavy-load downward. In addition, the device can return clean electric energy to achieve green energy-saving benefits.
Automatic Bypass Operation (Fully-Loaded Car)	When the elevator car is fully loaded, it will change to an auto-bypass state, executing the car calls only but ignoring the hall calls to improve efficiency.

Preventive Maintenance

Optional

Internet of Things (IoT)	IoT collects, analyzes, and utilizes elevator data through the network to optimize the intelligent elevator system and achieve the elevator functions of intelligent monitoring, preventive maintenance, and instant rescue.
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Artificial Intelligence

Optional

Face Recognition	After confirming the passenger's identity through the facial recognition system, the right to register the floor is granted, or the system can directly register to the preset destination floor. The system can also combine with the Destination Dispatch system to guide the identified passenger to the designated elevator. (The owner provides the face recognition machine, and Hitachi Yungtay Elevator provides the communication interface)
Voice Car-Calling	Passengers can register the destination floor in the car by voice, replacing the traditional touch button, reducing the risk of germ transmission.
People Flow Control	The system can automatically detect the number of people waiting in the hall. The intelligent group control dispatching system can flexibly increase the number of service elevators, which can instantly evacuate the crowd and shorten passengers' waiting and boarding time.
Smartphone Car-Calling	It uses the APP and BlueTooth from a smartphone or tablet to accurately locate the floor and quickly complete the elevator call and the destination floor registration.
Destination Dispatch	Log in to the destination floor before boarding the elevator, and distribute the passengers to each elevator through AI computing distribution, reduce the number of elevator stops, improve operation efficiency, and shorten the waiting time of passengers. (This function can also link with the access control system)
FT3X Group Control	In each car call from the hall, according to the relative position of each elevator and the registered car-calling signal, calculate the optimal dispatching arrangement, reducing the overall average waiting time and the probability of passengers waiting for a long time.

Functions and Equipment

Safety

Standard

Braking Force Detection System	Safety technology invention patent. The braking force detection of the elevator motor is automatically performed daily on a preset schedule. When the braking force becomes weakened, a warning code will be issued to notify the maintenance personnel to take preventive measures. Furthermore, suppose the braking force is insufficient, the elevator will stop service and generate a fault code for the maintenance personnel to troubleshoot to ensure the brakes' reliability and effectiveness.
Unintended Car Movement Protection (UCMP)	When the elevator door is opened for passengers to enter and exit, the brakes are immediately activated to stop the elevator service once the elevator moves unexpectedly. The elevator will resume regular operation only after maintenance and inspection by professionals.
Ascending Car Overspeed Protection (ACOP)	When the elevator goes up, suppose the speed limiter detects that the up speed exceeds the limit value, it will start the brake to stop the elevator to ensure that it runs safely at the rated speed.
Self-rescue System while Car Slipping	Safety technology invention patent. The system monitors the car's status when the elevator is in the door-opening zone. If the car is slipping, the computer host automatically outputs the holding torque to keep the car in the door-opening zone, immediately opening the door and reminding passengers to leave the elevator. When the car is vacant, the elevator closes the door and runs to the top floor (the safest position), generating a fault code and stopping service.
Infrared Light Curtain	The elevator will promptly detect any people or objects blocking the infrared light curtain and reopen the door during the closing process, improving passengers' safety.
Overload Protection Function	The load inspection apparatus installed on the bottom of the elevator car will send a warning and cannot be operated whenever overload is detected.
Alarm Function in Non-door-open Area	Suppose the elevator halts in the non-door-open area due to power failure or malfunction. In that case, the buzzer will alarm to show that the elevator door cannot open because the elevator is not landing in the floor area. Therefore, the car door cannot be opened unless the rescuers land the elevator in the door-open area to rescue the trapped personnel. The buzzer will stop alarming when the elevator reaches the door-open area.
Intercom	In the event of an emergency, press the emergency button to communicate with the administrator.

Overload Return Safety Device (ORS)

If an external force interferes during the door closing/opening, and this force exceeds the specified threshold, the elevator door will move in the reverse direction to ensure safety.

Next Floor Landing Function

When the car arrives on the floor but cannot fully open the door for any reason, such as object blocking, the car will travel to the next floor and automatically open the door. Also, when the car cannot successfully close the door due to the object stuck in the sill, the door will automatically open repeatedly until the object is removed.

Low-Speed Safe Landing while Malfunction

If the car has stopped between floors due to equipment malfunction, the car will automatically move to the nearest floor at low speed and open the door. Meanwhile, the elevator will stop service when the car is vacant.

Emergency Lighting

In the event of power failure, the emergency lighting installed on the car ceiling will automatically ignite.

Automatic Return to the Lowest Floor when Abnormal Position

For a running elevator, if the floor position judged by the system does not match the correct floor, it will be considered abnormal. At this time, the elevator will automatically move to the lowest floor (or the highest floor) at a slow speed and stop. After the system resets to the correct floor number, it can resume normal operation to ensure safety.

Optional

Anti-pry Car Doors

Additional automatic door locking function further protects safety by preventing in-car passengers from opening the door and falling into the hoistway.

Automatic Landing Device for Power Failure (ALP)

In the event of a power failure, the device will replace the regular power supply, and the elevator will automatically move to the nearest floor to allow passengers to exit the car safely, thereby avoiding the situation where passengers are locked in the elevator during a power failure.

Absolute Positioning System (APS)

The sensor above the elevator car reads the tape installed in the hoistway in a non-contact way to detect the current absolute position of the car. Avoid measurement errors caused by rope slippage or dynamic rope effects; even unfavorable environmental conditions (such as the presence of thick black smoke) do not affect the measurement results. In addition, it can increase the functions of upstream and downstream overspeed protection and check end-stage deceleration, greatly improving safety.

Mechanical Safety Shoe

During the door-closing process of the elevator, when the door safety shoe collides with a person or item, the elevator will stop closing and reopen the door immediately.

Mechanical Safety Shoe + Ultra-thin Light Curtain

During the door-closing process, if the person or object blocks the infrared rays emitted by the light curtain or collides with the safety shoes at the end of the elevator door, the elevator immediately stops and reopens the closing the door, which doubles the safety of passengers.

Functions and Equipment

Optional

Earthquake Emergency Operation	When the earthquake sensor is activated, the running elevator will automatically run to the nearest step and stop service. Simultaneously, "Earthquake Control" will be displayed in the operation panel.
Fire Alarm Operation	When a fire occurs, the elevator will automatically run to the refuge floor after receiving the fire alarm signal from the building equipment, allowing passengers to leave the car.
Fire Emergency Operation	When a fire occurs, the elevator will automatically run to the preset fire escape floor through the fire switch and then stop.
Firefighters' Emergency Operation	When a fire occurs, the elevator will automatically run to the preset floor of the fire escape through the fire switch. After the door opens, the fire-fighters will operate the elevator with a unique key.
Operating by Building Emergency Power	Suppose the building itself has power generation equipment, but only some elevators are allowed to be used. In that case, the elevators can be safely run to the refuge floor (lobby floor) according to the preset sequence, allowing passengers to leave. Finally, one or several elevators are reserved for transportation during a power outage. The elevator will automatically resume operation when the power supply returns to normal.

Security

Optional

Face Recognition	After confirming the passenger's identity through the facial recognition system, the right to register the floor is granted, or the system can directly register to the preset destination floor. The system can also combine with the Destination Dispatch system to guide the identified passenger to the designated elevator. (The owner provides the face recognition machine, and Hitachi Yungtay Elevator provides the communication interface)
Internet of Things (IoT)	IoT collects, analyzes, and utilizes elevator data through the network to optimize the intelligent elevator system and achieve the elevator functions of intelligent monitoring, preventive maintenance, and instant rescue.
Central Control and Monitoring System (YECM)	The YECM system transmits the elevator operation signal in the operation panel to the monitoring computer through digital communication. The administrator can monitor the running status of the elevator, set the running mode, issue control commands, perform statistical analysis of the elevator operation, make reservations, and record the faults of the elevator.
Smartphone Car-Calling	It uses the APP and BlueTooth from a smartphone or tablet to accurately locate the floor and quickly complete the elevator call and the destination floor registration.

Security Mode	When there is an intruder in the home, the user can enter the password through the floor button on the car control panel so that the elevator will move to the non-leveling floor and stand by, and the lighting and fans will continue to run. At this time, the system will automatically notify the service center through the IoT function, making the elevator a safe refuge.
Car Monitoring	The car monitoring device can automatically detect the situation in the car. For example, suppose the passenger falls over or cannot move; the elevator will automatically run to the lobby floor to open the door, sound an alarm, and notify the service center through the IoT function to minimize the damage of an accident.
Car Disinfection	"Positive and Negative Ions Air Purifier," "Antibacterial Handrail," and "UV Germicidal Lamp" provide clean space for the elevator and additional protection for the health of passengers.
Non-Contact Button	When moving the finger toward the button within 1 cm, passengers can trigger the button signal to call a car by induction. As a result, passengers do not need to press buttons directly, reducing the risk of germ infection.
Emergency Visible System	When an emergency occurs in the car, passengers can press the emergency video intercom button on the car's control panel to communicate with the outside. People outside the car can also know the situation in the car in real-time through the visual system to ensure the safety of passengers.
Elevator Multimedia Cam System (OPYM4)	It can display the dynamic position of the elevator and import information such as weather conditions or financial stock markets through the Internet. In addition, it provides passengers with real-time and valuable information and can provide functions such as audio and video advertisements and electronic announcements.
Card Reader Interface	Provide contact points for card reader machines in elevator halls or cars, reserve holes in the inner wall panels of the car, and assist in the installation of card reader machines so cardholders can use the elevator.
Password Call for Specific Floor	For specific floors, such as private residences and storage rooms, the owner can set password operation control after following specific steps and require personnel to call the elevator after operating the password. First, press the button of a specific floor, and then enter the three-digit password. Only when the password is correct can passengers reach the designated floor.
Monitoring and Control System (CCTV)	Through this device, the superintendent of the building can observe the situation in the elevator car to prevent the occurrence of crimes.
Supervisory Panel	The device consists of a display part for monitoring the running status of the elevator, an operation part for elevator operations, and an intercom for communication with the car.
Interphone System	When an emergency occurs in the car, press the emergency call button for more than 3 seconds, and the system will dial the preset outside line to ask for help. (six groups of phone numbers can be preset)

Functions and Equipment

Operating Functions

Standard

Sonic Car Button	When the passenger presses the hall control panel button, the button lights up with a response sound of "beep." The door will reopen if the button is pressed again during the door-closing process.
Inspection Operation	Start this function during elevator maintenance, and the elevator will run at a low speed.
Adjustable Door Opening Time	Depending on the number of people using the elevator on each floor, the owner can adjust the duration of the door opening freely.
Extended Door Opening Time Button	Pressing the door opening button can extend the elevator door opening hold time.

Optional

Out-of-Service Operation	For building management needs such as nights and holidays, the elevator needs to be parked; or when the elevator demand is low, the elevator is called back to the parked floor and stopped to save energy.
Attendant Operation (ATT)	Department stores and other crowded places can provide passengers service through elevator attendants.
VIP Operation	This operation provides a way to service the VIPs. Under this operation, the elevator will only respond to car calls but ignore hall calls.
Scheduled automatic stop/start management	Through the time setting of the timer, the elevator can automatically stop and start running within the preset time.
Signal Registration through Switch Key	On a specific floor, the switch key is used to replace the hall operation button to register the car call signal.
Non-Service for Specific Floor	Through the non-stop switch, the elevator can directly terminate the service of a specific floor.
Auxiliary Car Operating Panel	In addition to the primary car operating panel, install another operating panel to assist the floor register.
Extended Door Opening Time Through Accessible Operating Panel Calling	The door opening time of the elevator can be extended when passengers register the car call signal from the accessible operation panel (including the car panel and the hall panel).
Independent operation (For group management)	A designated elevator can be temporarily separated from the group control system and used as an independent operating elevator.

Signal and Display

Standard

Arrival Lighting in Hall (floor indicator blinking)	As the elevator travels, the directional arrows begin to flow. When the building name flashes, the elevator is about to arrive. During running: the running direction arrow moves with the running direction of the elevator. Before arrival: the button and the floor number flash.
Arrival Lighting in Car (landing floor button blinks)	The floor button in the car will flash to notify passengers in the car that the elevator is about to arrive. During running: the running direction arrow moves with the running direction of the elevator. Before Arrival: The button and the name of the building flash.

Optional

Arrival Chime (Electronic)	Electronic bells notify passengers that the elevator is about to arrive.
Arrival Lighting (hall lantern blinks)	The hall lantern flashes to notify passengers that the elevator is about to arrive.
Speech Synthesis (floor landing notice)	The female-friendly voice is used to broadcast station announcements through the voice synthesizer.
BGM Broadcast	The broadcast device of the building can be directly connected to the car and broadcast in the car.

Other Functions

Standard

Hall Indicator Inspection	The boarding indicators on each elevator floor can quickly screen out damaged indicators through the operation and inspection of maintenance personnel.
Elevator Door Stop Switch	The elevator door stop switch is installed in the operation box of the car operation panel. Maintenance personnel can carry out daily maintenance work by using this switch.
Running Time Display	Through the maintenance mobile phone to check the running time of the elevator.

Purchase Information and Excluded constructions

Our Company will charge the design, manufacture, and installation of the elevator. However, any items listed as follows do not include in the elevator quotation. As a result, please entrust other contractors about construction or electricity engineering to handle these parts.

Purchase Information >

Please provide the information as follows when purchasing the elevator or inquiring about the related specifications.

01. Construction Name
02. Construction Site Location or Address
03. Elevator Dimensions (passenger or weight load, rated speed, door opening measure, and control measure)
04. Number of Elevator Installations
05. Number of Landing Floors and Height of Each Floor
06. Power Supply Voltage and Frequency.
07. Car, Hall Fixtures, and Design.
08. Architectural Drawing for Elevator Installation Desired (steel structure of the whole building is necessary)
09. Due Date in Expectation (should there be any other questions, please contact us, we will answer and explain to you as soon as possible.)

Excluded Constructions

I. Hoistway

01. The construction of the hoistway is based on the drawings provided by Party B. It includes the entrances and exits of each floor, the preserve holes for buttons and indicators, and the caulking of the door frame after installation.
02. If the hoistway is of steel structure or light partition wall, support beams and columns for fixing guide rails, door frames, buttons, indicators, and other equipment; and primary iron parts for intermediate beams and reinforcing beams.
03. Piping and wiring work for emergency telephones or other equipment (such as monitors, remote monitoring systems, monitoring panels, multimedia, card reader machines and fire alarm switchboards) from the hoistway to the guard room (or administrator room, monitoring room).
04. Suppose the elevator entrance and exit doors have fire prevention functions. In that case, the piping and wiring work from the fire alarm reception switchboard to the elevator recall button to the evacuation level, and reserve a no-voltage A contact on the fire alarm reception switchboard.
05. Waterproof and drainage work for pits and concrete foundation works for buffers.
06. Primary side power supply equipment (including power supply, car lighting power supply, independent grounding system, switch, and the power receiving panel) and the piping and wiring project of leading the power supply to the hoistway.

II. Others

01. Before the elevator enters the site for construction, the surrounding of the hoistway should be truly closed, and party B should install related guardrail protection equipment at the entrances and exits of each floor. If the hoistway is a glass curtain or cannot be reliably closed due to other factors, party B should provide other anti-fall measures (such as guardrails, safety nets, and other anti-fall measures). Party B must clear sundries such as formwork, wooden strips, safety nets, and steel bars in the machine room and the hoistway (if this item is not completed, due to the safety of the operation, personnel will not be dispatched to the site for construction).
02. After the machine parts are delivered to the construction site, party B should provide a storage place for the goods and tools. However, if the installation cannot be performed due to the reasons of Party A, the responsibility for keeping the machine parts shall be responsible to Party A.
03. After unpacking and installing the goods, Party B shall dispose of them at the designated place. Party A shall be responsible for clearing and transporting them to the construction site.
04. Party B shall provide the cement, sand and gravel, water, and electricity required in the construction and the power supply for installation and operation consistent with the official electricity consumption.
05. Party B shall provide the height reference line of the elevator entrance and exit and the complete reference line of the elevator wall as the basis for the elevator installation.

Related Regulations

National Standards of the Republic of China (CNS) and related regulations

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| 01. Elevators for personal residences are suitable for the construction and inspection of vertical lifts used in personal residences in low-rise buildings below five floors. They are not suitable for public use. | 【CNS14328.1】 |
| 02. For machine-roomless elevators, the main switch of the power receiving panel should be located near the controller, which must be easy to operate and safe. | 【CNS2866 4.4.2. (1)】 |
| 03. When using emergency elevators, backup power should provide. Furthermore, the building structure of the lift for emergency use shall comply with the provisions of the building's technological rules and relevant regulations. Besides, it should respect the indication of letter No. 8904590 of the National Fire Agency, Ministry of the Interior. It stipulates that "emergency elevators should not equip with car readers machine for riding." | 【CNS2866 4.1.2. (4)】 |
| 04. Piping and wiring unrelated to the elevator shall not install in the hoistway. | 【CNS2866 4.1.9. (11)】 |
| 05. There should be no water leakage in the elevator pit, and it needs to clean. | 【CNS2866 4.1.10. (1)】 |
| 06. The bottom plate of the elevator pit should be able to withstand the fully-loaded car or counterweight. | 【CNS2866 4.1.10. (11)】 |
| 07. The hoistway and the inner wall of the elevator pit should be flat and smooth without any protrusions. | 【CNS2866 4.1.10. (12)】 |
| 08. Each hoistway must be completely closed except for the openings of entrances and exits and ventilation equipment. | 【CNS2866 4.1.10. (14)】 |
| 09. When any part of the lower part of any hoistway is used for human use or similar use, emergency safety devices must also be installed on the counterweight side compared to the car. | 【CNS2866 4.1.10. (21)】 |
| 10. Except for the car and its attached equipment, no objects shall install or set up in the hoistway. Also, appropriate space shall be set aside to keep the car safe. | 【Article 110-1 of the Architectural Equipment of Building Technical Regulations】 |
| 11. Except for the entrance door and ventilation holes, the hoistway should be enclosed walls with a fire-proof structure and have sufficient strength to support the guide rails of the car and counterweight. | 【Article 110-3 of the Architectural Equipment of Building Technical Regulations】 |
| 12. The pit below the ground should be of waterproof structure, and appropriate space should be reserved to maintain safe operation. Since there may be other users on the ground directly below the pit, the bottom of the pit should have sufficient safety strength to resist any impact from the car. | 【Article 112-1 of the Architectural Equipment of Building Technical Regulations】 |
| 13. The beam or floor supporting the elevator should be able to bear the total weight of the elevator. | 【Article 118 of the Architectural Equipment of Building Technical Regulations】 |
| 14. The elevator shall be equipped with a device to land on the nearest floor when a power failure occurs. | 【Article 110-6 of the Architectural Equipment of Building Technical Regulations】 |

Excluded Constructions

According to the following laws and regulations, elevator equipment must obtain a use permit before it can use. Furthermore, in line with the rules of the competent authority, Party A needs to submit a copy of the construction license and other relevant documents, while Party B can submit an application for completion inspection to the professional inspection unit on behalf of Party A :

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| 01. After the installation of the elevator equipment is completed, it is not allowed to use it unless it has passed the completion inspection and obtained the use license. | 【Article 3 of the Certificate of Administrative Regulations on Installment and Inspection of Elevator in Building】 |
| 02. The administrator shall entrust a professional manufacturer to be responsible for the maintenance of the elevator equipment. Technicians shall implement it monthly according to the general maintenance procedures. | 【Article 4 of the Certificate of Administrative Regulations on Installment and Inspection of Elevator in Building】 |
| 03. Unless the owners have obtained a use permit after completing the inspection, the building elevator and mechanical parking equipment shall not be used. | 【Article 77-4 of Building Act】 |

Maintenance Service

Over 1200 Professional Licenses

Using electronic data management, high-precision diagnostic tools, and a complete logistics parts-providing system, our professional maintenance service personnel build the most functional maintenance team.



Over 30 Service Locations

Our service bases all over the country have formed a perfect and rapid elevator service safety net connecting every customer's heart.

24-Hour Service Center

We keep in check with the elevator conditions in all year round, providing 24-hour maintenance timely.

Over 60,000 Maintenance Performance

We have been developing steadily for over 50 years and have more than 60,000 installations and maintenance experience with elevators and escalators in Taiwan.

Service Station

- **Taolin Service Station** +886-3-376-1321
No. 5, Ln. 35, Kunming Rd., Taoyuan Dist., Taoyuan City 333020, Taiwan (R.O.C.)
- **Taoyuan Branch Company** +886-3-317-1879
No.29, Lane 1314, Chunrih Rd., Taoyuan Dist., Taoyuan City 330020, Taiwan (R.O.C.)
- **Jhongli Service Station** +886-3-451-4540
1F., No.36, Fushou 9th St., Zhongli Dist., Taoyuan City 320029, Taiwan (R.O.C.)
- **Zhubei Service Station** +886-3-656-5382
No.76, Guangming 14th St., Zhubei City, Hsinchu County 302006, Taiwan (R.O.C.)
- **Hsinchu Service Station** +886-3-562-0568
No.41, Jianhua St., East Dist., Hsinchu City 300033, Taiwan (R.O.C.)

- **Taichung Branch Company** +886-4-2472-7878
3F., No. 98, Sec. 2, Dongxing Rd., Nantun Dist., Taichung City 408470, Taiwan (R.O.C.)
- **Xitun Service Station** +886-4-3609-5162
4F., No.35, Zhonggong 2nd Rd., Xitun Dist., Taichung City 407016, Taiwan (R.O.C.)
- **Fongyuan Service Station** +886-4-2526-7118
No.93, Fongtian Rd., Fongyuan District, Taichung City 420010, Taiwan (R.O.C.)
- **Taiping Service Station** +886-4-3609-5326
No. 41, Chang'an E. Rd., Taiping Dist., Taichung City 411012, Taiwan (R.O.C.)
- **Changhua Service Station** +886-4-700-3602
4F., No.399-5, Sanmin Rd., Changhua City, Changhua County 500003, Taiwan (R.O.C.)

- **Douliou Service Station** +886-5-534-7342
No.29, Baochang Rd., Douliou City, Yunlin County 640002, Taiwan (R.O.C.)
- **Chiayi Service Station** +886-5-232-5151
No.420, Beigang Rd., West Dist., Chiayi City 600078, Taiwan (R.O.C.)
- **Tainan Branch Company** +886-6-303-8600
No.18, Dongciao 1st Rd., Yongkang Dist., Tainan City 710038, Taiwan (R.O.C.)

- **Zuoying Service Station** +886-7-350-8715
No.222-1, Chongxin Rd., Zuoying Dist., Kaohsiung City 813011, Taiwan (R.O.C.)
- **Kaohsiung Branch Company** +886-7-761-5161
No.200, Dashun 3rd Rd., Lingya District, Kaohsiung City 802013, Taiwan (R.O.C.)

- **Fengshan Service Station** +886-7-766-0126
No.188, Nanjing Rd., Fengshan Dist., Kaohsiung City 830036, Taiwan (R.O.C.)
- **Pingtung Service Station** +886-8-751-1889
No. 21, Ln. 34, Jianxing S. Rd., Pingtung City, Pingtung County 900044, Taiwan (R.O.C.)

- **Building Service System** +886-2-2709-3355
No. 6, Aly. 54, Ln. 63, Sec. 2, Dunhua S. Rd., Da' an Dist., Taipei City 106099, Taiwan (R.O.C.)
- **Tien Mu Service Station** +886-2-8866-2369
No.10, Ln. 47, Huangxi St., Shilin Dist., Taipei City 111046, Taiwan (R.O.C.)
- **Chung Shan Service Station** +886-2-2515-0656
1F., No.5, Ln. 39, Sec. 3, Minquan E. Rd., Zhongshan Dist., Taipei City 104078, Taiwan (R.O.C.)
- **Chung Cheng Service Station** +886-2-2336-2697
2F.-1, No.232, Kangding Rd., Wanhua Dist., Taipei City 108015, Taiwan (R.O.C.)

- **Tamsui Service Station** +886-2-2621-5958
No. 77, Ln. 169, Beixin Rd., Tamsui Dist., New Taipei City 251025, Taiwan (R.O.C.)
- **Keelung Service Station** +886-2-2433-1210
No.26, Ln. 166, Sec. 2, Anle Rd., Anle Dist., Keelung City 204011, Taiwan (R.O.C.)
- **Pei Hai Service Station** +886-2-2695-0754
No. 315, Kangning St., Xizhi Dist., New Taipei City 221013, Taiwan (R.O.C.)
- **Wen Shan Service Station** +886-2-2218-7051
No.9, Lane 127, Jhongyang Rd., Sindian Dist., New Taipei City 231015, Taiwan (R.O.C.)
- **Pan Cheng Service Station** +886-2-2266-6091
No.2, Lane 262, Sec. 1, Jhongyang Rd., Tucheng Dist., New Taipei City 236028, Taiwan (R.O.C.)
- **Shan Chung Service Station** +886-2-2999-8058
1F., No. 12-4, Ln. 609, Sec. 5, Chongxin Rd., Sanchong Dist., New Taipei City 241017, Taiwan (R.O.C.)
- **Shuanghe Service Station** +886-2-8221-8728
No. 1, Ln. 91, Jian 1st Rd., Zhonghe Dist., New Taipei City 235602, Taiwan (R.O.C.)

- **Luodong Service Station** +886-3-954-6160
1F., No.93, Tianxiang Rd., Luodong Township, Yilan County 265033, Taiwan (R.O.C.)
- **Hualien Service Station** +886-3-823-6397
No.71-30, Jhongmei Rd., Hualien City, Hualien County 970064, Taiwan (R.O.C.)
- **Taitung Service Station** +886-970-036-709
No. 22, Aly. 91, Ln. 357, Sec. 6, Zhongxing Rd., Taitung City, Taitung County 950029, Taiwan (R.O.C.)

