

VERTECH

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<http://www.vertech.co.th>

Certificates and Engineering Cases

Certificates



TUV-CE - ESCALATOR



TUV-CE - MOVING WALK



TKJ1600-2.0 ENERGY EFFICIENCY



TAK-8 ENERGY EFFICIENCY



TUV-CE-MR - PASSENGER ELEVATOR



TUV-CE-MRL - PASSENGER ELEVATOR

Engineering Cases



Grand Kamala Lagoon ,Jakarta,Indonesia



Subway project, Seoul, South Korea



Hotel, Novosibirsk,Russia



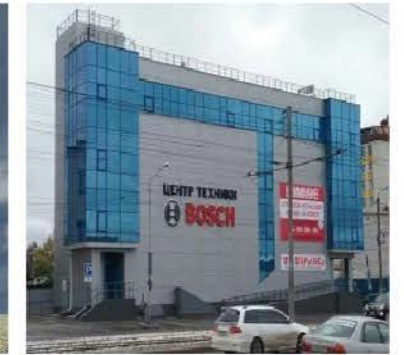
Parque de Ocio,Bogota, Colombia



Laleh Building, Mashhad Iran



ARG Shopping Mall, Mashhad, Iran



Ulan-Ude Bosch Sales Center



Hotel Yasmin Karawaci, Indonesia



Police Station, South Africa



Russia-Moscow-Marriott



Aftab Shopping Mall, Mashhad, Iran



Saint Petersburg Shopping Mall



Not Asking



Moscow shopping mall



Moscow shopping Mall



Moscow shopping Mall



Tobolsk Office Building

Passenger Elevator With Machine Room

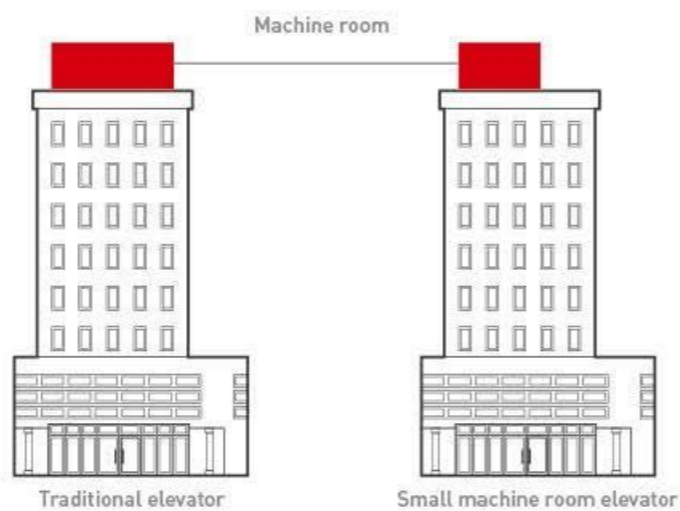
Saving room volume

50%

Space efficiency

The machine room of the elevator only need 50% space of the traditional machine room. Therefore, it provides more possibilities for construction design.

Tenau passenger elevators with small machine room have improved its performance by reducing area of their machine rooms. With advantages in saving floor areas and construction costs, the elevators are applicable to office buildings, hotels and supermarkets.

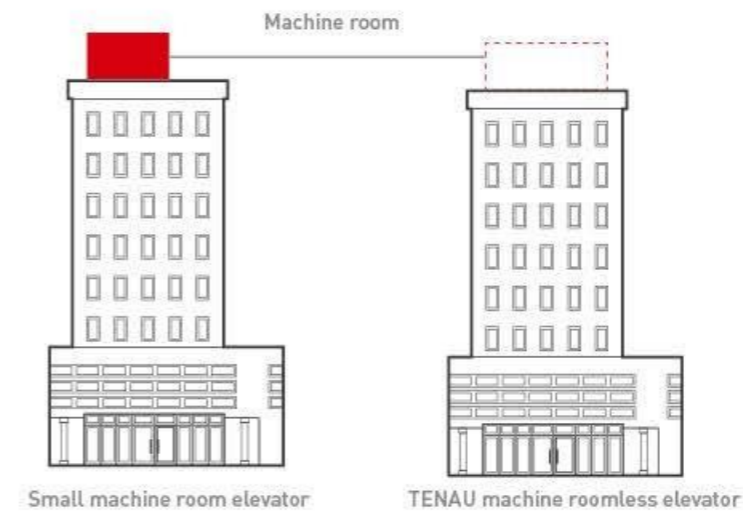


Passenger Elevator Machine Roomless

Tenau machine roomless passenger elevators eliminate influence of the machine room on construction from the structural aspect, providing more possibilities for construction space arrangement or construction design. Such elevators are applicable to hotels, business buildings high-rises and other buildings with higher requirements for construction.

Free up the space

The control cabinet and traction machine are installed in inner part of the hoist way, freeing up the original space spared for the machine room. Compared with traditional design, the new mode could save more than 10% of the floor area.



Cabin Decoration

Passenger Elevator



TO-J001

Standard

Integrated Ceiling: Painted steel, four sides down lamp
 Car wall and car door: Stainless steel
 Operation panel: Hairline stainless steel
 Floor: PVC floor



TO-J002

Standard

Integrated Ceiling: Silver membrane, with LED lamp in the middle, vents on both sides
 Car wall and car door/Front wall panel: Light grey painted steel plate
 Operation panel: Hairline stainless steel (Separated type)
 Skirting: Stainless steel or painted steel plate
 Floor: PVC floor



TO-J005

Optional

Car wall: Mirror stainless steel, titanium stainless steel
 Car door: Mirror stainless steel
 Gatepost: Titanium hairline stainless steel round tube
 Skirtboard: Painted steel
 Floor: PVC



TO-J006

Optional

Car wall and car door: Mirror stainless steel
 Hairline stainless steel
 Gatepost: Hairline stainless steel
 Skirtboard: Stainless steel or painted steel
 Floor: PVC



TO-J003

Optional

Car wall and car door: Mirror stainless steel in the Middle, craft wooden facing on the other sides
 Gatepost: Mirror stainless steel
 Skirtboard: Stainless steel
 Floor: PVC



TO-J004

Optional

Integrated Ceiling: Painted steel, down lamp
 Car wall: Mirror stainless steel in the middle, hairline stainless steel for both sides
 Floor: PVC floor



TO-J007

Optional

Car wall: Middle with mirror etching stainless steel, side of stainless steel floor with tube lamp of soft illumination design
 Car side and car back: Center board is made of mirror finish, etching finish, hairline finish Auxiliary board is made of hairline finish
 Handrail: Stainless steel round tube
 Floor: PVC



TO-J008

Optional

Car wall: Painted steel, tube lamp an white transparent board for illumination design Car side and car back: Center board is made of mirror finish, etching finish, hairline finish
 Auxiliary board is made of hairline finish
 Handrail: Stainless steel flat handrail
 Floor: PVC

Cabin Decoration

Passenger Elevator



TO-J009

Optional

Ceiling: Painted steel, downlight
 Car wall: Panel with combination of wood grain and hairline
 Front wall: Hairline stainless steel
 Floor: PVC
 Skirting: Hairline stainless steel



Selection of back panel material



GL-01



GL-02



GL-03

TO-J010

Optional

Ceiling: Mirror stainless steel, Lamp bracket, LED downlight
 Car wall: Brushed stainless steel
 Front wall: Art glass, brushed stainless steel
 Floor: PVC parquet



Selection of back panel material



3699-Rattan



6928-Ch



2567-Copper



1395-Ta

TO-J011

Optional

Ceiling: Metal baking paint decoration, LED downlight
 Car wall: Brushed stainless steel
 Front wall: fire-proof facing with wood grain, Brushed stainless steel
 Floor: PVC



TO-J012

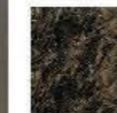
Optional

Ceiling : Metal baking paint decoration, LED downlight
 Car wall: Brushed stainless steel
 Front wall: Fire-proof facing with marble texture, Brushed stainless steel
 Floor: PVC

Selection of back panel material



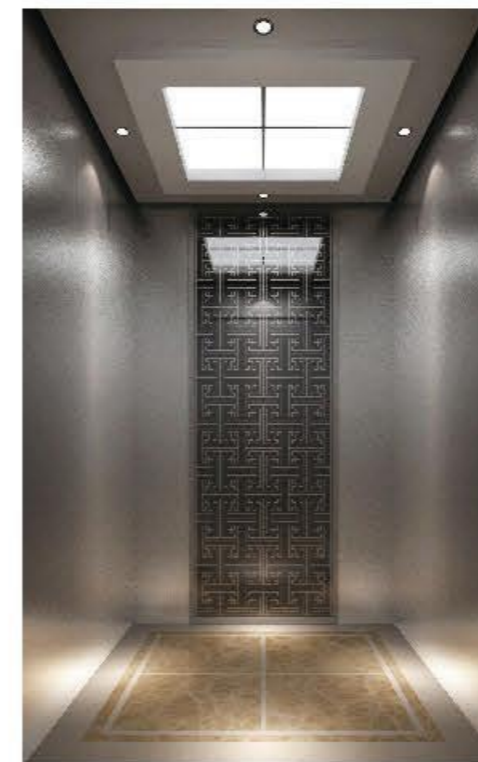
3457 - Br



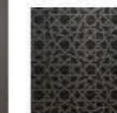
3467 BSt



3465 Gl



Selection of back panel material



SK-01



SK-02



SK-03

TO-J013

Optional

Ceiling: Metal baking paint decoration, Lamp bracket, LED downlight
 Car wall: Brushed stainless steel
 Front wall: Brushed stainless steel, black titanium mirror surface with stainless etching, brushed stainless steel side decoration strips and foot lines
 Floor: PVC

Cabin Decoration

Passenger Elevator



TO-J014

Optional

Ceiling: Hairline stainless steel, down lamp
 Car wall: Side wall: Hairline stainless steel, mirror stainless steel
 Rear wall: Hairline stainless steel, mirror etching stainless steel
 Handrail: Stainless steel, wood
 Floor: PVC floor



TO-J015

Optional

Ceiling: Hairline stainless steel, four sides down lamp
 Car wall: Stainless steel mirror, wood grain laminated plate
 Floor: PVC floor



TO-J016

Standard

Ceiling: Mirror stainless-steel modeling, light filter, LED down lamp
 Car wall: Front wall: Brushed stainless steel
 Rear wall: Art wallpaper, mirror stainless steel
 Side wall: Fireproof composite veneer, brushed stainless steel
 Floor: PVC floor



TO-J017

Optional

Ceiling: Mirror stainless steel, LED down lamp, white stoving varnish and tape lights
 Car wall: Side wall: mirror stainless steel, fire-proof panel with marbling, brushed stainless steel capping strip, brushed stainless steel skirting line and brushed stainless steel gib
 Rear wall: mirror stainless steel, art glass, brushed stainless steel capping strip, brushed stainless steel skirting line
 Floor: Marble parquet



TO-J018

Optional

Ceiling: Mirror stainless steel, LED down lamp, white stoving varnish and tape lights
 Car wall: Side wall: Black titanium mirror stainless steel, wood grain fire-proof plate, brushed stainless steel capping strip, brushed stainless steel skirting line, brushed stainless steel and stainless steel handrail
 Rear wall: Black titanium mirror stainless steel, rose gold mirror stainless steel etching, brushed stainless steel capping strip and brushed stainless steel skirting line
 Floor: Floor tiles

Panoramic Elevator

Tenau observation elevator adheres to the design principle of innovativeness and fashion. To meet various demands of hotels and supermarkets, our company provides different elevator designs according to their building styles. Delicate style designs provide passengers with different scenic perspectives and broad scenic views.



Delicate lift car

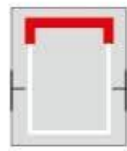
Tenau provides different decoration options for lift cars, so as to match up facades and interior decoration of various buildings.

Rich structures

Square, circular and polygon reinforced glass structures offer different scenic perspectives and bring all views to eyes of passengers.



Semi-circular shaped panorama elevator



Square shaped panorama elevator



Cutting-angle-type panorama elevator

Comfortable and stable operation

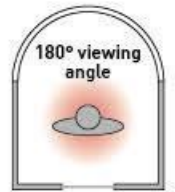
Our company aims to improve experience of passengers by applying several advanced technologies and creating dynamic and comfortable space. Passengers will feel pleasant and comfortable during stable operation of the elevator.

Transparent structures for wide views

The elevator adopts safe laminated glass which could offer wide views by its transparent nature. Streamline design and wide views provide passengers with a broad and clear world they have never experienced.



Panoramic Elevator 180° half-round observation



TO-G001

Standard

Canopy: Painted steel with decoration
 Observation wall: Three pieces of laminated glass
 Car Ceiling: Mirror stainless steel
 Car wall: Hairline stainless steel
 Handrail: Single tube with stainless steel
 Car floor: PVC floor



TO-G002

Standard

Car Cover: Paint steel, tube lamp, acrylic lamp
 Observation Wall: Laminated glass three pieces
 Decoration Roof: Acrylic roof lamp
 Car Wall: Hairline finished St/St
 Handrail: ϕ 38 Stainless steel tube
 Floor: PVC floor



TO-G003

Standard

Upper / lower hood: White acrylic
 Observation wall: Laminated glass (5+5 three pieces)
 Decoration ceiling: Steel plate plastic, tube lamp
 Car wall: Hairline stainless steel
 Handrail: ϕ 38 stainless steel tube
 Floor: PVC



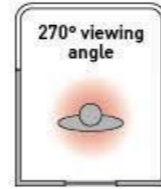
TO-G004

Standard

Car Cover: Paint steel plate, decoration lamp
 Observation Wall: 3PCs of safety laminated glass
 Decoration Roof: Acrylic roof lamp
 Car Wall: Hairline plate, etched
 Handrail: Stainless steel tube
 Floor: PVC floor

Panoramic Elevator

270° three-side observation



TO -G005

Standard

Car Cover: Painted steel, Tube Lamp
 Observation Wall: Laminated glass
 Decoration Roof: Acrylic lighting cover
 Car Wall: Hairline Finished St/St
 Handrail: ϕ 25.4 Stainless steel double tube
 Floor: PVC Floor



TO -G006

Standard

Car cover: Baking enamel, lighting decoration
 Observation wall: Laminated glass safety clamp
 Decoration ceiling: Mirror finished st./st, acrylic
 Car wall: Laminated glass
 Handrail: Stainless steel tube
 Floor: PVC



TO -G007

Standard

Upper/lower shades: Stepped pentagon steel plate banking finish with decoration lamp
 Ceiling: Middle with acrylic roof lamp, side with tube lamp
 Side wall and back wall: Stainless steel hairline board
 Front wall: Laminated glass safety clamp
 Handrail: Stainless steel round handrail
 Floor: PVC floor



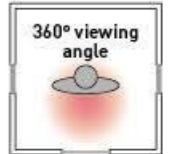
TO -G008

Optional

Car cover: Hairline stainless steel, stainless steel mono-tube
 Observation wall: Safety laminated glass
 Decoation roof: Mirror stainless steel, light-emitting panel, down lamp
 Car wall: Hairline stainless steel
 Handrail: Stainless steel mono-tube
 Floor: PVC

Panoramic Elevator

360° 3D full-view observation



TO -G009

Optional

Outer decoration: Mirror ST. ST.
 Ceiling: Mirror ST. ST., acrylic, LED spotlight
 Observation wall: Laminated safety glass
 Walls: Mirror ST. ST.
 Handrail: ST. ST. tube
 Flooring: Marble
 Front wall: Laminated safety glass
 Car door: Mirror ST. ST. framed glass door



TO -G010

Optional

Car cover: Baking painted steel, acrylic lighting decoration
 Observation wall: Laminated glass, 6+6mm
 Decorative ceiling: Baking painted steel frame, light-passing board
 Car wall: hairline Stainless steel
 Handrail: Stainless steel flat handrail
 Floor: PVC



TO -G011

Optional

Outer decoration: Mirror ST. ST.
 Ceiling: Mirror ST. ST., acrylic, LED spotlight
 Observation wall: Laminated safety glass
 Walls: Mirror ST. ST.
 Handrail: ST. ST. tube
 Flooring: Marble
 Front wall: Laminated safety glass
 Car door: Mirror ST. ST. framed glass door

Hospital Elevator

Tenau high-quality medical elevator is developed on basis of deep researches on demands of medical institutions. Our company uses advanced technologies and humanized design to meet demands of doctors and patients for delivering stretchers and medical devices. The elevator is characterized by reliability, stability, accuracy, comfortable experience and energy efficiency. It can meet demands of modernized hospitals, medical centers and sanatoriums.



Automatic ultraviolet disinfection (optional)

In case of staying in idle status, the elevator will automatically start up ultraviolet disinfection device to eliminate viruses and keep the lift car clean.

Deferred closing button (optional)

The elevator is equipped with deferred closing button to delay the closing, so as to guarantee personal safety of medical staff and patients while they enter or leave the lift car.

Safety and reliability

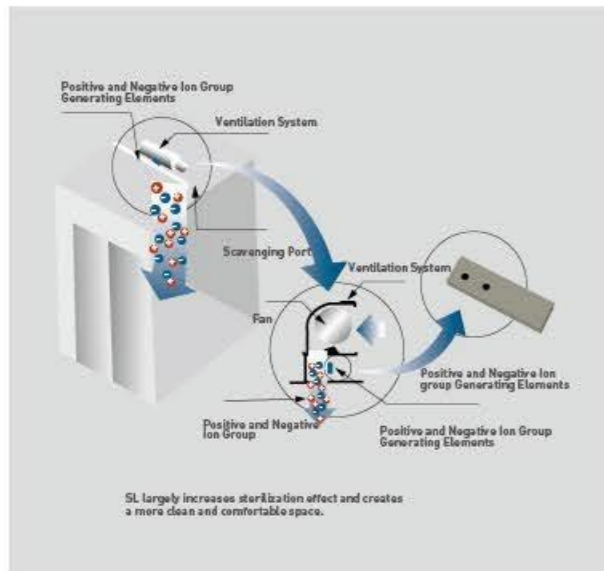
Complete security technology system ensures safe operation of the elevator and provides medical staff and patients with more care.

Optimized lift car structure

The lift car enables heavy load with a satisfactory depth. It could hold stretchers or even sickbeds.

EMC (electromagnetic compatibility)

The elevator can resist electromagnetic interference of medical devices to meet demands of medical systems.



TO-Y001

Standard

Ceiling: Painted steel, fluorescent lighting, tube lamp (integration)
 Car wall: Hairline stainless steel
 Handrail: Double flat stainless steel
 Floor: PVC



TO-Y002

Standard

Ceiling: Hairline stainless steel
 Car wall: Hairline stainless steel
 Handrail: Double flat stainless steel
 Floor: PVC

Cabin operation Panel

Standard



TO-C010



TO-1030A



TO-CEC301



TO-LSC260
Wall-mounted
control box

Optional



TO-C500



TO-C500X
Wall-mounted
control box

Display: Dot-matrix display
Material: Hairline stainless steel
Parking number: Below 28F

Button optional

TO-AN112
Square stainless steel,
with braille

TO-AN113
Circular stainless steel,
with braille

Multimedia display



TO-LCD01



TO-LCD02

Optional



TO-C600



TO-C610X
Wall-mounted
control box

Display: Dot-matrix display
Material: Hairline stainless steel
Parking number: Below 28F

Button optional

TO-AN112
Square stainless steel,
with braille

TO-AN113
Circular stainless steel,
with braille



TO-C8002



TO-C8004
Inserted
integrated model



Touch TO-C8012



Touch TO-C8011

Integrated operation panel



TO-C700
Integrative
operation panel

Display: Dot-matrix display
Material: Hairline stainless steel

Optional decoration

Hall operation panel (optional)



TO-C8002X



TO-C8002X-2



T09001



TO-C010X



TO-C010X-2



TO-DEC300



TO-LEC300



TO-EH1030A



TO-EHD1030A

Buttons (Optional)



TO-A101



TO-A102

Direction light (optional)



TOK212



TOG371



TOK451

Multimedia (Optional)



Picture display
7 inch
8 inch
10.4 inch



Video display
8 inch
10.4 inch
12.1 inch & 15 inch

Ceiling



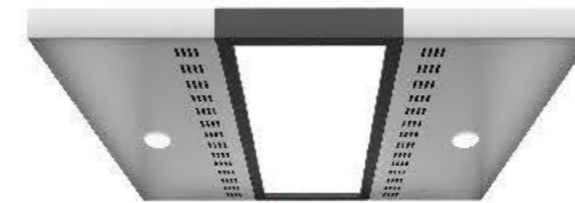
TO-D101

Painted steel plate, four side down lamp



TO-D102

Painted steel, downlight



TO-D103

Stainless steel, LED lighting



TO-D106

Mirror stainless steel, LED downlight



TO-D010

Stainless steel mirror board, energy-saving lamps



TO-D040

Stainless steel mirror board, energy-saving lamps



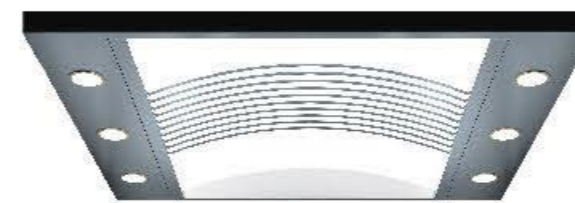
TO-D190

Painted steel, acrylic translucent panel



TO-D140

White transparent light board, energy-saving lamps



TO-D200

Image roof, stainless steel, tube lamp with soft illumination



TO-D230

White light-emitting panel, down lamps on both sides

Optional decoration

Handrail (Optional)



Landing door series



TO-M010
Landing door: Paint steel
Jamb: Paint steel



TO-M011
Landing door: Mirror, etching, hairline
Jamb: Hairline stainless steel



TO-M012
Landing door: Mirror, etching, hairline
Jamb: Hairline stainless steel



TO-M013
Landing door: Mirror, etching
Jamb: Hairline stainless steel

Color card



TO-M014
Landing door: Hairline stainless steel
Jamb: Hairline stainless steel



TO-M015
Landing door: Mirror, etching, hairline
Jamb: Hairline stainless steel



TO-M016
Landing door: Mirror, etching, hairline
Jamb: Hairline stainless steel



TO-M020
Landing door: Mirror, etching, vibration,
hairline concave in golden
Jamb: Hairline stainless steel

Floor



Function Table

S-Standard **O-optional, Need to increase Optional**

Travel function	
S VWF drive	Motor rotating speed can be precisely adjusted to get smooth speed curve in lift start,travel and stop and gain the sound comfort.
S VWF door operator	Motor rotating speed can be precisely adjusted to get the more gentle and sensitive door machine start/stop.
S Independent running	The lift can not respond to outer calling, but only respond to the command inside the car through the action switch.
S Automatic pass without stop	When the car is crowded with the passengers or the load is close to preset value, the car will automatically pass the calling landing in order to keep maximum travel efficiency.
S Automatically adjust door opening time	Door-open time can be automatically adjusted according to the difference between landing calling or car calling.
S Reopen with hall call	In the door shutting process, press reopen with hall call button can restart the door.
S Express door closing	When the lift stops and opens the door, press door-shut button, the door will be closed immediately.
S Car stops and door open	The lift decelerates and levels, the door only opens after the lift comes to a complete stop.
S Car arrival gong	Arrival gong in the car top announces that the passengers arrive.
S Command register cancel	If you press the wrong floor command button in the car,twice continuous pressing of the same button can cancel the registered command.
O Anti- nuisance	In the light lift load, when three more commands appear, in order to avoid the unnecessary parking, all the registered callings in the car will be cancelled.
O Open the door in advance	When the lift decelerates and enters into door open zone, it automatically opens the door to enhance the travel efficiency.
O Direct parking	It completely accords with distance principle with no crawling in the leveling, It greatly enhances the travel efficiency.
O Group control function	When three or more same model lift groups are controlled in use, the lift group can automatically choose the most appropriate response. It avoids the repeated lift parking, reduces the passengers' waiting time and increases the travel efficiency.
O Duplex control	Two sets of same model lifts can unanimously respond the calling signal through the computer dispatch. In this way, it reduces the passengers' waiting time to the greatest extent and enhances the travel efficiency as well.
O On-duty peak service	Within the preset on-duty time, upward transport from the home landing is extremely busy. The lift are continuously dispatched to the home landing in order to satisfy on-duty peak service.
O Off-duty peak service	Within the preset off-duty period, the lifts are continuously dispatched to top floor in order to satisfy off-duty peak service.
O Door open time extending	Press special button in the car, the lift door keeps open for certain period of time.
Man-machine interface	
S Micro-touch button for car call and hall call	Novel micro-touch button is used for operation panel command button in the car and landing calling button.
S Floor and direction indicator inside car	The car shows the lift floor location and current travel direction.
S Floor and direction indicator in hall	The landing shows the lift floor location and current travel direction.
O Voice announcer	When the lift normally arrives, voice announcer informs the passengers about the relevant information.
O Car assistant operation box	It is used in the large loading weight lifts or the lifts with crowded passengers so that more and more passengers can use the car.
O Operation box for the handicapped	It is convenient for the wheelchair passengers and those who have vision problems.
O Intelligent calling service	The car command or hoist-way calling can be locked or connected through special Intelligent Input.
O IC card control function	All (partial) landings can only input car commands through IC Card after the authorization.

Monitor function

O Remote monitor	The lift long-distance monitor and control can be fulfilled through modem and telephone. It is convenient for the factories and service units to timely know the travel conditions of every lift and promptly take the corresponding measures.
O Remote control	The lift can have independent travel according to the specific requirements through operation monitor screen (optional).
O Camera function in the car	The camera is installed in the car to monitor the car conditions.

Safety function

S Light curtains protection	In the door open and shut period, infrared light that covers the whole door height is used to probe the door protection device of both the passengers and objects.
S Designated stop	If the lift can not open the door in the destination floor out of some reason, the lift will close the door and travel to the next designated floor.
S Overload holding stop	When the car is overload, the buzzer rings and stops the lift in the same floor.
S Anti-stall timer protection	The lift stops operation due to slippery traction wire rope.
S Start protection control	If the lift does not leave door zone within the designated time after it gets started, it will stop the operation.
S Inspection operation	When the lift enters into inspection operation, the car travels at inching running.
S Fault self-diagnosis	The controller can record 62 latest troubles so as to quickly remove the trouble and restore the lift operation.
S Repeated door closing	If the lift can not close the door due to certain obstacle or interference, the lift will reopen or re-shut the door until sundries are eliminated.
S Up/down over-run and final limit protection	The device can effectively prevent from the lift's surging to the trouble and restore the lift operation.
S Down over-speed protection device	When the lift down 1.2 time higher than the rated speed, this device will automatically cut off control mains, stop the motor running so as to stop lift down at over-speed. If the lift continues to down at over-speed, and the speed is 1.4 time higher than rated speed, safety tongs act to force the lift stop in order to ensure the safety.
S Upward over-speed protection device	When the lift up speed is 1.2 times higher than rated speed, the device will automatically decelerate or brake the lift.
S Elevator cab prevents accidental movement	When the elevator is in the open state, if there is accidental movement, the elevator cab can prevent the movement.

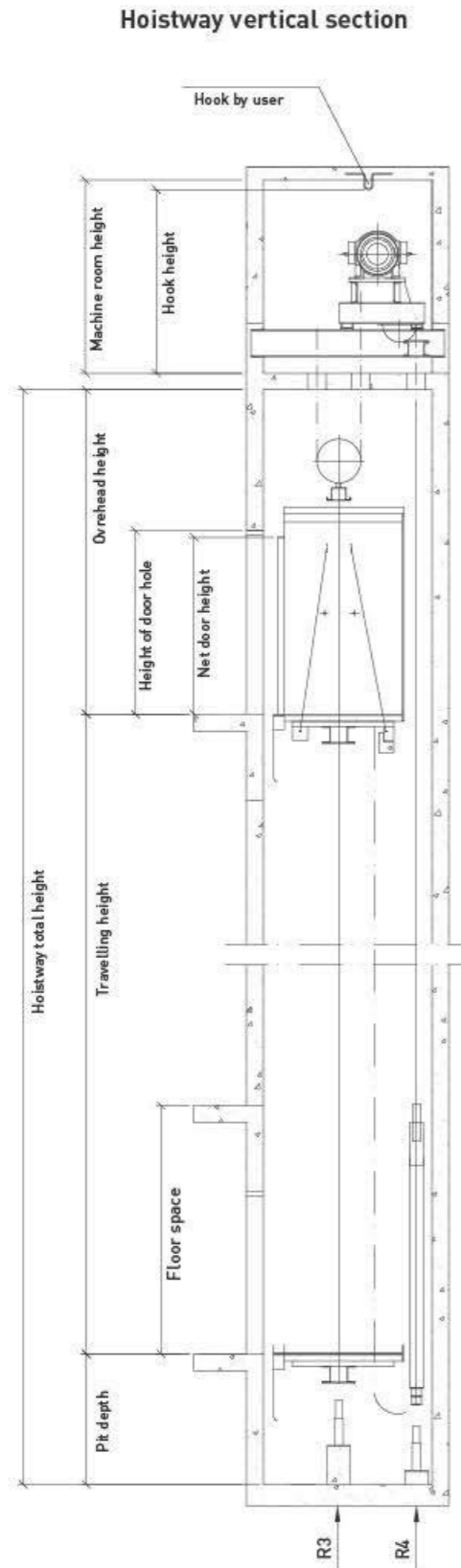
Emergency function

S Emergency car lighting	Emergency car lighting automatically activated once power failure.
S Inching running	When the lift enters into emergency electric operation, the car travels at low speed inching running.
S Five way intercom	Communication amid car car top, lift machine room, well pit and rescue duty room through walkie-talkie.
S Bell	In emergency conditions, if bell button above car operation panel is continuously pressed, electric bell rings on top of the car.
S Fire emergency return	If you start key switch in main landing or monitor screen, all the callings will be cancelled. The lift directly and immediately drives to the designated rescue landing and automatically opens the door.
O Leveling when power failure	In normal power failure, the chargeable battery supplies the lift power. The lift drives to the nearest landing.

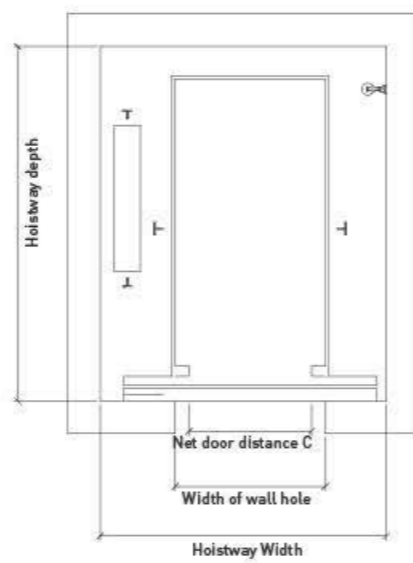
Energy-saving function

S Car ventilation, light automatic shut off	If there is no calling or command signal within the stipulated time, the car fan and lighting will be automatically closed in order to save the energy.
S Remote shut-off	The lift can be called to main landing (after finishing the service) through the key switch and automatically exists the service.

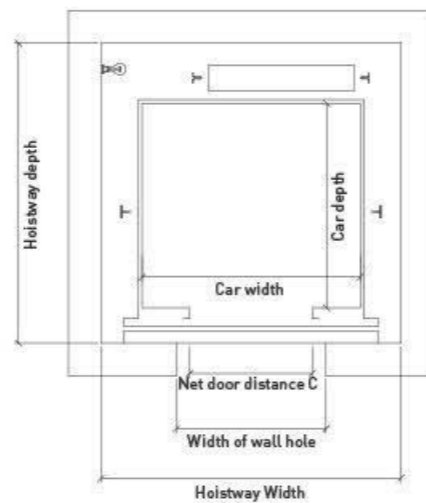
Machine Room Passenger Elevator Construction Parameter



Shaft plan layout(side)



Shaft plan layout(back)



Back machine room passenger elevator parameters

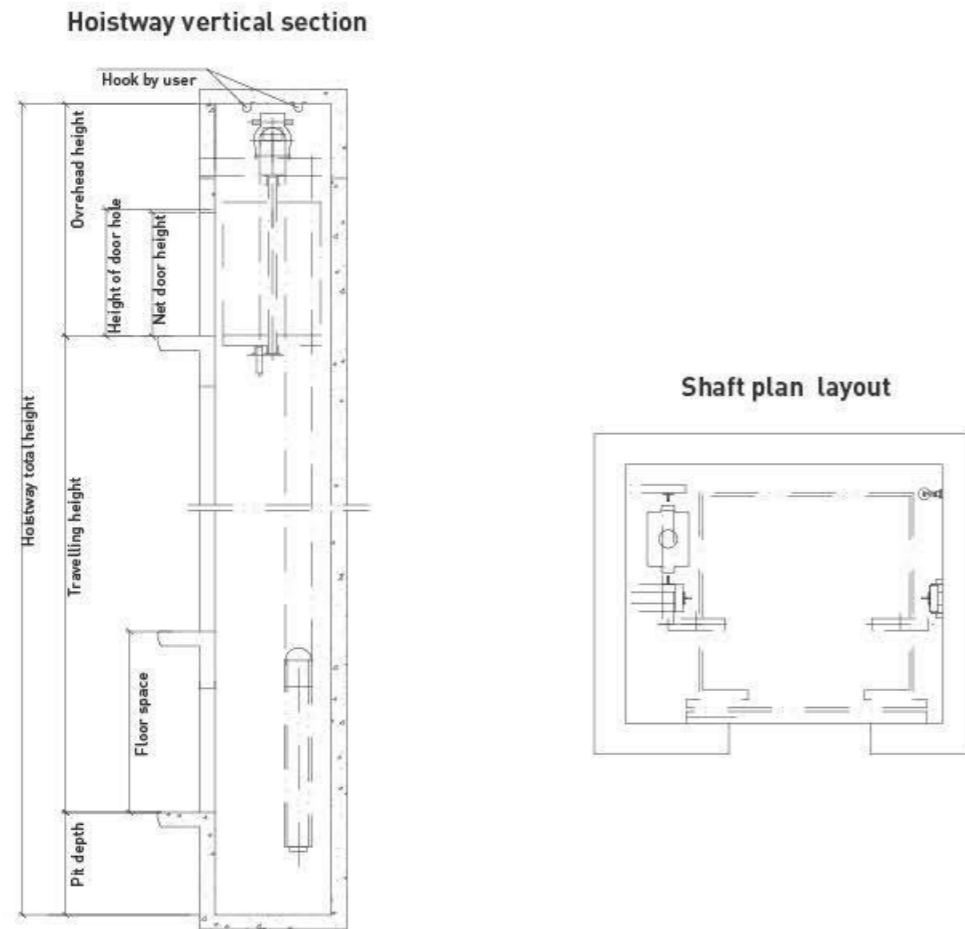
Load(kg)	Speed (m/s)	Car dimension(mm)	Door-opening size(mm)	Hoistway size(mm)	Overhead height (OH)	Pit depth (PP)
		Inner size AXB	Net door-opening	Width x depth		
630	1.0	1400X1100	800	1950X1750	4000	1200
	1.5				4100	1300
	1.75				4200	1400
	2.0				4500	1500
800	1.0	1400X1350	800	1950X2000	4000	1200
	1.5				4100	1300
	1.75				4200	1400
	2.0				4500	1500
	2.5				2000X2050	5000
1000	1.0	1600X1500	900	2150X2150	4000	1200
	1.5				4100	1300
	1.75				4200	1400
	2.0				4500	1500
1250	2.5	1800X1550	1100	2350X2200	5000	2000
	1.0				4000	1200
	1.5				4100	1300
	1.75				4200	1400
	2.0				4500	1500
1350	2.5	1900X1600	1100	2450X2300	5000	2000
	1.0				4000	1200
	1.5				4100	1300
	1.75				4200	1400
1600	2.0	1950X1700	1100	2500X2400	5000	2000
	1.0				4000	1200
	1.5				4100	1300
	1.75				4200	1400
	2.5				2550X2450	5000

Side machine room passenger elevator parameters

Load(kg)	Speed (m/s)	Car dimension(mm)	Door-opening size(mm)	Hoistway size(mm)	Overhead height (OH)	Pit depth (PP)
		Inner size AXB	Net door-opening	Width x depth		
630	1.0	1400X1100	800	2200X1700	3800	1200
	1.5				3900	1300
	1.75				4000	1400
	2.0				4300	1500
800	1.0	1400X1350	800	2200X1800	3800	1200
	1.5				3900	1300
	1.75				4000	1400
	2.0				4300	1500
	2.5				2250X1850	5000
1000	1.0	1600X1500	900	2400X1950	3800	1200
	1.5				3900	1300
	1.75				4000	1400
	2.0				4300	1500
1000 Stretcher elevator	2.5	1100X2100	900	2100X2500	5000	2000
	1.0				3800	1200
	1.5				3900	1300
	1.75				4000	1400
	2.0				4300	1500
1250	2.5	1800X1550	1100	2600X2050	5000	2000
	1.0				3800	1200
	1.5				3900	1300
	1.75				4000	1400
	2.0				4300	1500
1350	2.5	1900X1600	1100	2750X2100	5000	2000
	1.0				3800	1200
	1.5				3900	1300
	1.75				4000	1400
1600	2.0	1950X1700	1100	2800X2200	5000	2000
	1.0				3800	1200
	1.5				3900	1300
	1.75				4000	1400
	2.5				2850X2250	5000

The above civil construction parameter is for reference. Civil construction is subject to the formal civil construction diagrams.

Machine Roomless Passenger Elevator Construction Parameter

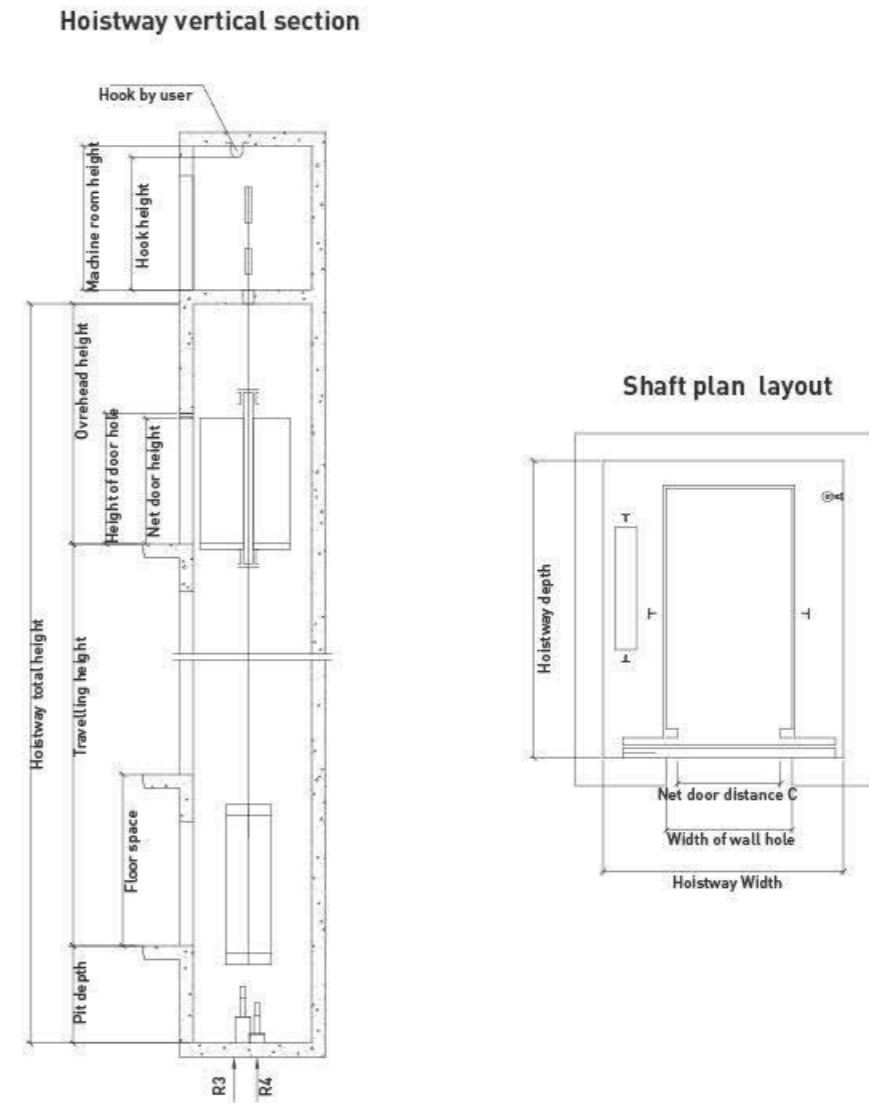


Machine roomless passenger elevator parameters

Load(kg)	Speed (m/s)	Car dimension(mm)	Door-opening size(mm)	Hoistway size(mm)	Overhead height (OH)	Pit depth (PP)
		Inner size AXB	Net door-opening	Width x depth		
630	1.0	1400X1100	800	2250X1750	3800	1300
	1.5				3900	1400
	1.75				4000	1500
	2.0				4300	1600
800	1.0	1400X1350	800	2250X1800	3800	1300
	1.5				3900	1400
	1.75				4000	1500
	2.0				4300	1600
1000	1.0	1600X1500	900	2450X1900	3800	1300
	1.5				3900	1400
	1.75				4000	1500
	2.0				4300	1600
1250	1.0	1800X1550	1100	2700X2000	4000	1300
	1.5				4100	1400
	1.75				4200	1500
	2.0				4300	1600
1350	1.0	1900X1600	1100	2800X2100	4000	1300
	1.5				4100	1400
	1.75				4200	1500
	2.0				4300	1600
1600	1.0	1950X1700	1100	2850X2200	4000	1300
	1.5				4100	1400
	1.75				4200	1500
	2.0				4500	1600
1600 Hospital elevator	1.0	1400X2400	1100	2550X2900	4200	1300
	1.5				4300	1400
	1.75				4400	1500
	2.0				4500	1600

The above civil construction parameter is for reference. Civil construction is subject to the formal civil construction diagrams.

Hospital Elevator Construction Parameter

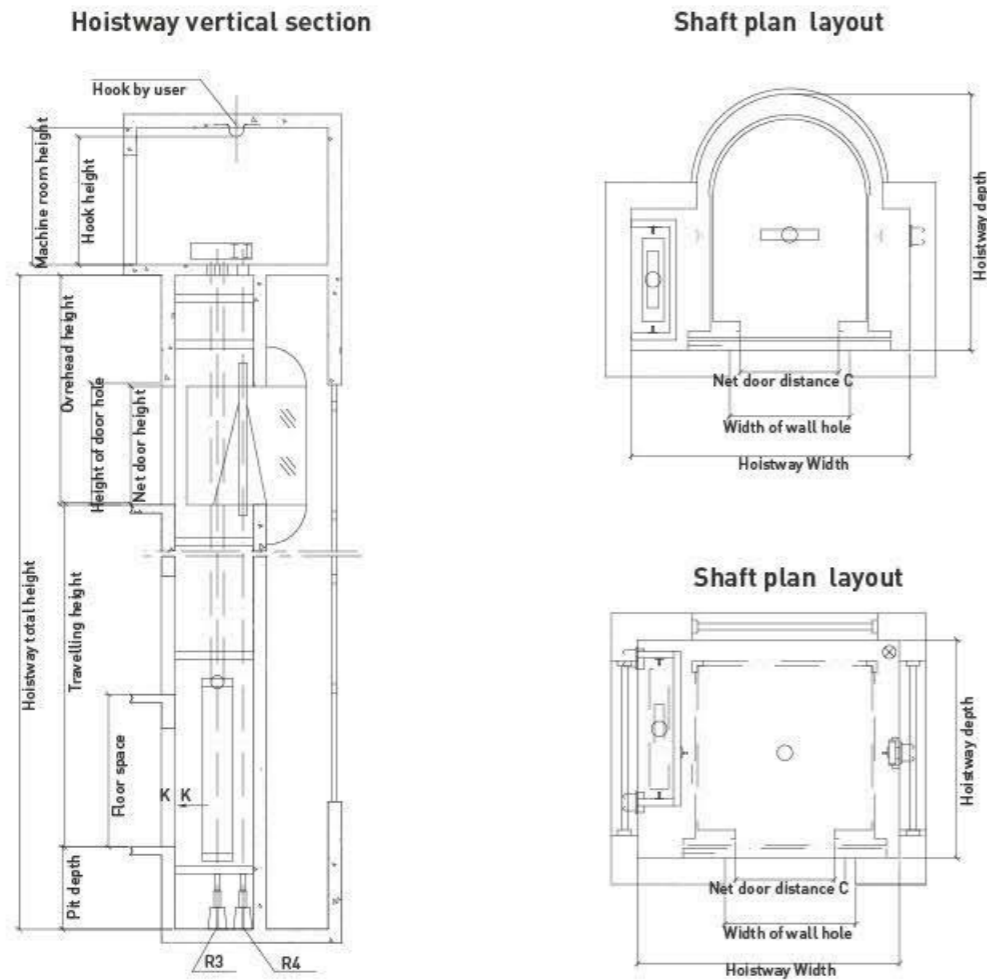


Hospital elevator parameters

Load(kg)	Speed (m/s)	Car dimension(mm)	Door-opening size(mm)	Hoistway size(mm)	Overhead height (OH)	Pit depth (PP)
		Inner size AXB	Net door-opening	Width x depth		
1600	1.0	1400X2400	1100	2500X2900	4000	1300
	1.5				4100	1400
	1.75				4200	1500
	2.0				4300	1600
2000	1.0	1500X2700	1300	2550X2950	5000	2000
	1.5				4000	1300
	1.75			4100	1400	
	2.0			4200	1500	
2000	2.0	1500X2700	1300	2600X3200	4300	1600
	2.5				5000	2000

The above civil construction parameter is for reference. Civil construction is subject to the formal civil construction diagrams.

Machine Room Panoramic Elevator Construction Parameter

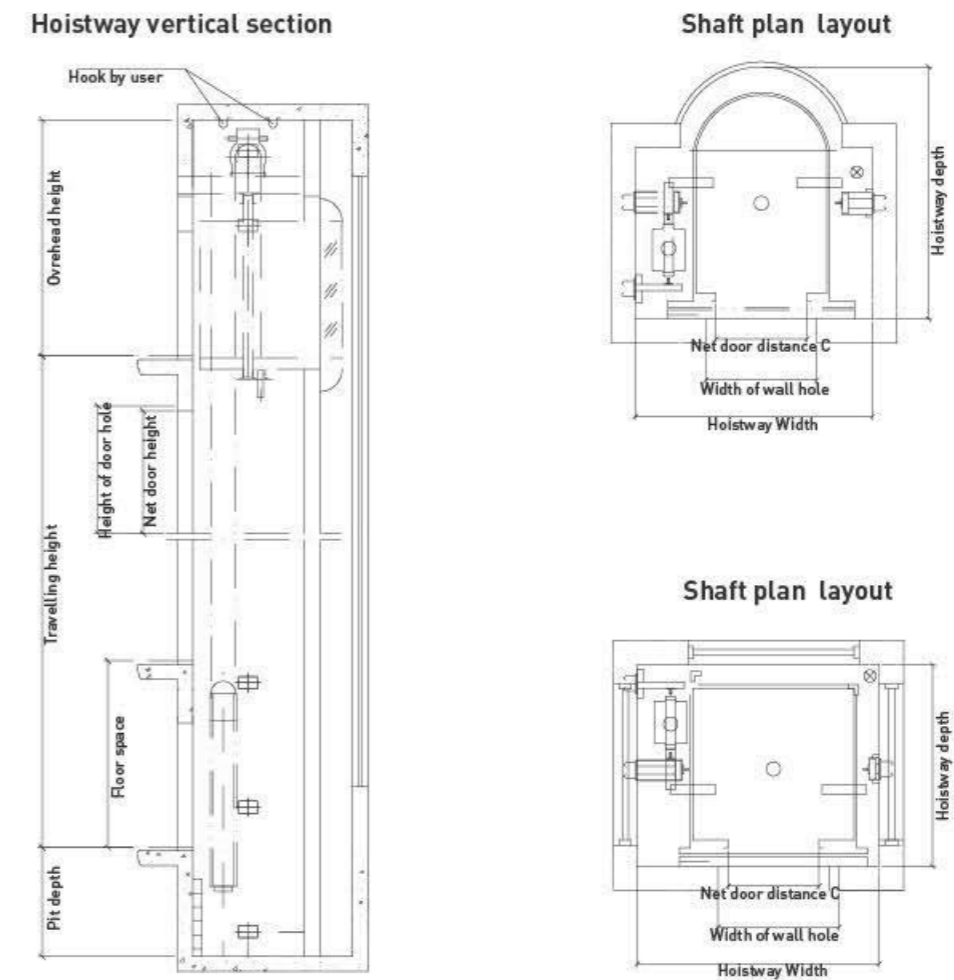


Machine room panoramic elevator parameters

Load(kg)	Speed (m/s)	Car dimension(mm)		Door-opening size(mm)	Hoistway size(mm)		Overhead height (OH)	Pit depth (PP)
		Inner size AXB		Net door-opening	Width x depth			
		Square	Round		Square	Round		
630	1.0	1400X1100	1300X1700	800	2200X1700	2150X2250	4000	1500
	1.5						4100	1600
	1.75						4200	1700
	2.0						4300	1800
800	1.0	1400X1350	1300X1700	800	2200X1800	2350X2250	4000	1500
	1.5						4100	1600
	1.75						4200	1700
	2.0						4300	1800
1000	1.0	1600X1500	1400X1850	900	2400X2000	2450X2350	4000	1500
	1.5						4100	1600
	1.75						4200	1700
	2.0						4300	1800
1250	1.0	1800X1550	1400X2150	900/1100	2600X2100	2350X2650	4200	1500
	1.5						4300	1600
	1.75						4400	1700
	2.0						4500	1800
1600	1.0	1950X1700	1500X2300	1000/1100	2750X2200	2500X2850	4200	1500
	1.5						4300	1600
	1.75						4400	1700
	2.0						4500	1800

The above civil construction parameter is for reference. Civil construction is subject to the formal civil construction diagrams.

Machine Roomless Panoramic Elevator Construction Parameter



Machine roomless panoramic elevator parameters

Load(kg)	Speed (m/s)	Car dimension(mm)		Door-opening size(mm)	Hoistway size(mm)		Overhead height (OH)	Pit depth (PP)
		Inner size AXB		Net door-opening	Width x depth			
		Square	Round		Square	Round		
630	1.0	1400X1100	No	800	2250X1700	No	4000	1500
	1.5						4100	1600
	1.75						4200	1700
	2.0						4300	1800
800	1.0	1400X1350	1300X1700	800	2250X1800	2150X2500	4000	1500
	1.5						4100	1600
	1.75						4200	1700
	2.0						4300	1800
1000	1.0	1600X1500	1400X1850	900	2450X2000	2350X2500	4000	1500
	1.5						4100	1600
	1.75						4200	1700
	2.0						4300	1800
1250	1.0	1800X1550	1400X2150	900/1100	2650X2100	2500X2650	4200	1500
	1.5						4300	1600
	1.75						4400	1700
	2.0						4500	1800
1600	1.0	1950X1700	1500X2300	1000/1100	2850X2200	2600X2850	4200	1500
	1.5						4300	1600
	1.75						4400	1700
	2.0						4500	1800

The above civil construction parameter is for reference. Civil construction is subject to the formal civil construction diagrams.

Spacious Space Taste Leisurely Life

Open space for your luxury villa
To highlight your identity, even the lift car
of elevator is no exception.

With compact design adopted for Tenau villa elevator, it saves the using area of well by 15%-20% and could provide larger size of lift car in the same well. The maximum net height of lift car can reach 2200mm (roof height: 3m), which can bring you open space experience and make you go in and out more easily.

It can save the using area of
well at least by 15%

15%

The roof height can reach 3m

3M



Green And Noiseless Design Gives You Healthy Life

Equivalent to that released by
a big tree with the height of 5m

5M

Filters PM2.5 to make lift car
filled with exceptional fresh air

PM2.5

8 million- negative oxygen ion fan (optional)

The anion it releases is equivalent to that released by a big tree with the height of 5m. In the meantime, it can sterilize, absorb methanol, remove peculiar smell & second-hand smoke and filter PM2.5 to make lift car filled with exceptional fresh air.

8 million negative oxygen ion fan



The application of a series of intelligent technologies to Tenau villa not only brings you comfort but also health.

Villa cabin decoration

Warm and Elegant



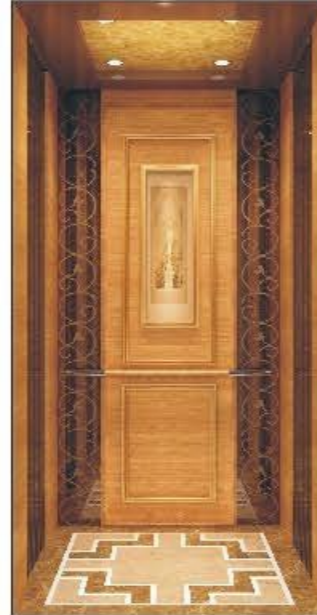
TO-V001

Optional

Ceiling: wooden modelling, gold foil, lamp belt and LED tube lamp
 Side wall: craft wooden facing, wallpaper and craft glass
 Rear wall: craft wooden facing, car edge mirror and wallpaper
 Handrail: craft handrail
 Floor: marble pattern



Warm and Elegant



TO-V002

Optional

Ceiling: rose gold mirror stainless steel, gold foil and LED tube lamp
 Side wall: craft wooden facing and rose gold mirror stainless steel etching
 Rear wall: craft wooden facing and rose gold mirror stainless steel etching
 Handrail: craft handrail
 Floor: marble pattern



Minimalist Style



TO-V043

Optional

Ceiling: hairline stainless steel, acrylic light decoration, down light
 Car wall: hairline stainless steel, mirror stainless steel
 Handrail: stainless steel tube
 Floor: PVC pattern



Modern Style



TO-V010

Optional

Ceiling: mirror stainless steel, LED downlight
 Car wall: wood veneer, mirror stainless steel
 Floor: PVC



Simple



TO-V003

Optional

Ceiling: metal stoving varnish modeling, LED tube lamp
 Side wall: color grain steel plate, white stoving varnish steel plate and brushed stainless steel trim strip
 Rear wall: color grain steel plate, white stoving varnish steel plate
 Floor: PVC pattern



Enjoyable



TO-V040

Optional

Ceiling: painted steel frame, middle mirror stainless steel, surrounded by downlight lighting
 Side wall: rosewood veneer
 Rear wall: both sides of the rosewood, the middle mirror titanium etching stainless steel
 Floor: marble pattern



Golden Age



TO-V019

Optional

Ceiling: titanium mirror, cross-flow fan, LED floodlight
 Side wall: titanium mirror etching, marble
 Rear wall: titanium mirror, marble
 Floor: marble pattern



Simple



TO-V004

Optional

Ceiling: metal stoving varnish modeling, mirror stainless steel and LED tube lamp
 Side wall: color grain steel plate
 Rear wall: marble pad pasting, black titanium mirror stainless steel
 Floor: PVC pattern



Villa decoration

Car operation panel



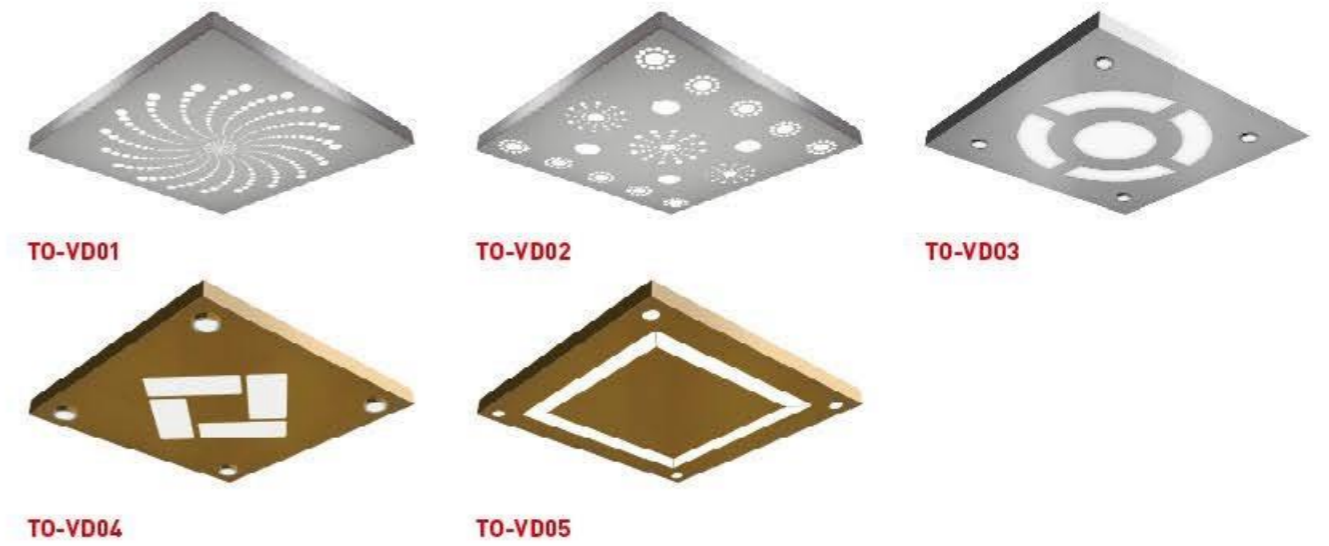
Handrail



Hoistway frame



Ceiling



Landing door series



Floor



Function Table

S Standard Function **O** Optional Function

General Protection

S Closing time protection	S Protection against reverse travel
S Emergency lighting in the car	S Prevent slipping protection
S Overload warning (Caution light and buzzer)	S Safety circuit protection
S The screen door protection device	S Limit protection
S Car roof and control cabinet emergency electric operation	S Upper and lower limit protection device
S Fault automatic diagnosis	S Door interlock protection
S Alarm bell	S Operation contactor protection
S Hitting the bottom buffer device	S Brake detection and protection
S Outside door zone without opening door	S Manual brake release rescue
S Wave detection of grid voltage	S Machine room door switch
S Contactor feedback detection	S Driven equipment overheating protection (OHT)
S Relay detection protection	S Electric brake
S Speed feedback detection	S Automatic rescue device
S Fault low-speed self-rescue	S Emergency power supply device operation
S Hb button embedded self-diagnosis	

Information Display

S Hall and car digital position indicator	S Running number display
S Hall and car call/register	S Floor display character arbitrary setting
S Hall and car running direction display	

Steady Running

S Return to base station without call	S Pre-torque output
S Full collective control	S Upon elevator floor setting
S Independent service	S Hoistway self-learning
S Full-load direct running (LNS)	S End station for speed and floor number correction
S Automatic door switch	S Parking

Passenger Comfortability

S Hall and car door setting time	S Bypassed stop setting
S Open and close button	S Input port evaluation
S Automatic ventilation and lighting of automatic control in car	S Manually selected floor
	S Cancellation of wrong landing
S Hb calls door opening	O Voice announcement
S Repeated closing door	O Liquid display

Security Monitoring

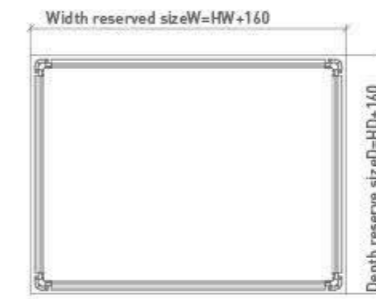
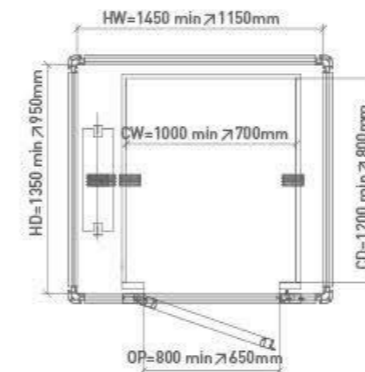
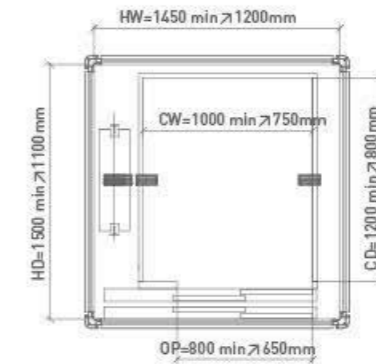
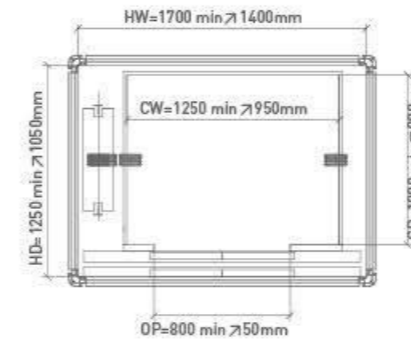
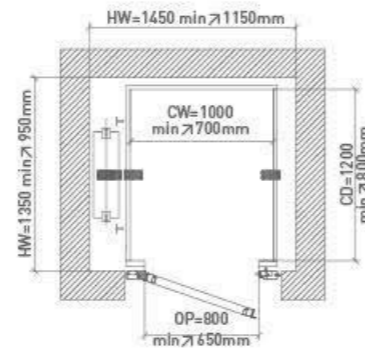
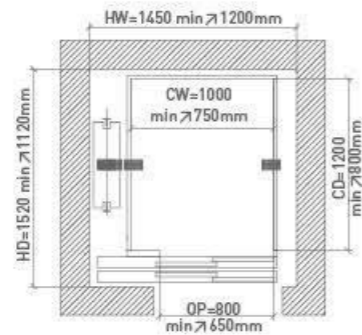
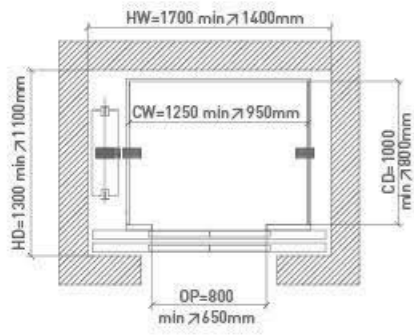
O CCTV cable (From car to machine room)	O BA interface (Dry contact)
S Elevator remote control	O Community monitoring panel
O Card reader	O Community computer monitoring

Construction Parameter Villa Elevator

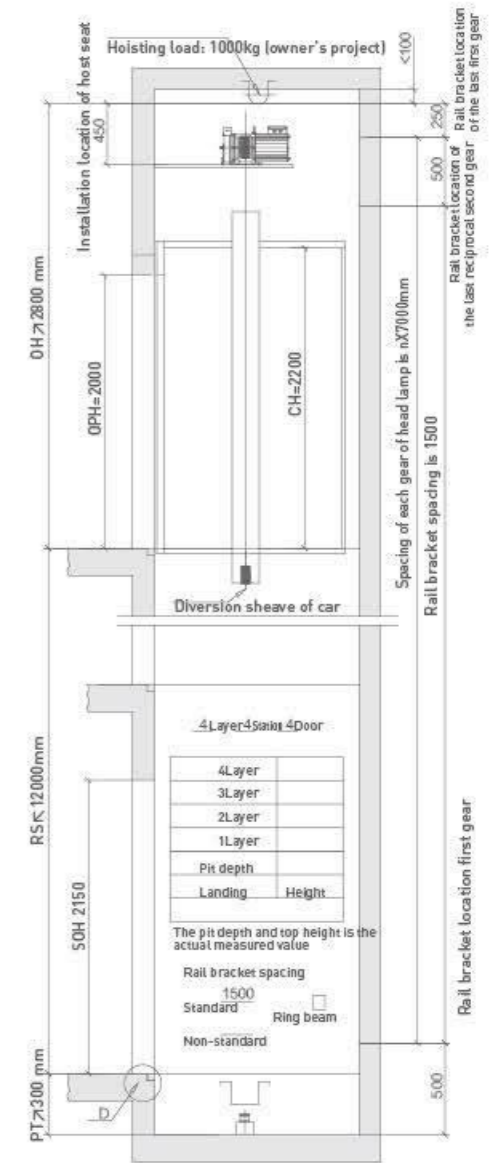
Villa elevator construction

Such as the need of the wheelchair, please offer another dimension by Tenau

Load kg	Car width CW	Car depth CD	Door opening width OP	Hoistway width HW	Hoistway depth HD
250	800	1000	700 Side opening	1300	1350
320	1000	1000	700 Center opening	1500	1300
400	1000	1200	800 Center opening	1500	1500



Hoistway vertical section



Model:TEH200

Type	Data	Car width	Car depth	Door opening width	Hoistway width	Hoistway depth
1HD	Min value	700	800	650	1150	950
	Calculation formula	HW-450	HD-150	HW-500	CW+450	CD+150
2CO	Min value	950	800	650	1400	1100
	Calculation formula	HW-450	HD-300	HW/2-50	CW+450	CD+300
2RO	Min value	750	800	650	1200	1120
	Calculation formula	HW-450	HD-320	(HW-200)/1.5	CW+450	CD+320

Note: The dimension for door opening width only includes 650, 700, 750 and 800 at the present. When calculating with formula, the result is for the four dimensions, please round down to the designated dimension.
The above civil construction parameter is for reference. Civil construction is subject to the formal civil construction diagrams.

Model:TEH200

Type	Data	Car width	Car depth	Door opening width	Hoistway width	Hoistway depth	External width of the frame	External depth of frame
1HD	Min value	700	800	650	1150	950	1210	1110
	Calculation formula	HW-450	HD-150	HW-500	CW+450	CD+150	HW+160	HD+160
2CO	Min value	950	800	650	1400	1050	1560	1210
	Calculation formula	HW-450	HD-250	HW/2-50	CW+450	CD+250	HW+160	HD+160
2RO	Min value	750	800	650	1200	1100	1360	1260
	Calculation formula	HW-450	HD-300	(HW-200)/1.5	CW+450	CD+300	HW+160	HD+160

Note: 1. The dimension for door opening width only includes 650, 700, 750 and 800 at the present. When calculating with formula, the result is for the four dimensions, please round down to the designated dimension.
2. Top height of hoistway is OH≥2800, pit depth is PT≥300.
The above civil construction parameter is for reference. Civil construction is subject to the formal civil construction diagrams.

Freight Elevator



This elevator is specifically designed for the transportation of cargoes, with many wide door opening modes and spacious yet sturdy car, suitable for the transportation of large cargoes and ensuring the safety when passengers and cargoes both present in the car. Technically, advanced CPU control is applied, realizing contact free control to elevate the performance of the elevator, making it the best choice for cargo transportation in factories, warehouses and malls, etc.

Consider practicality

Considering the size of the cargoes, the designing for the door of the car adopts multiple methods to open, so as to ensure the width of the door opening is the same as that of the car, making cargoes move freely in and out.

Subtle processing

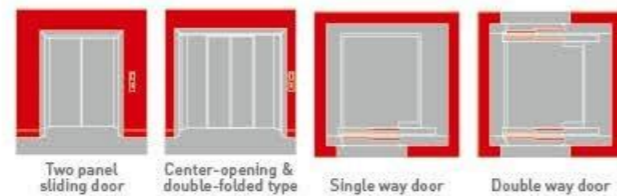
WVF technology ensures constant torque and, with a sturdy car, the elevator can keep constant operation under all circumstances and precise floor leveling.

Proven safety

Based upon standardized safety device, the slippery resistance as well as the door machine's safety configuration is improved, which ensures the precise leveling for cargo transportation.

The multiple door opening modes

In order to satisfy different entry / exit requirements from vast users, TENAU freight elevator offers four door opening modes of side opening, central opening double-folded door, one-way door opening, opposite door opening. It can flexibly match with the factory, warehouse, department store, shopping center, housing property management center etc.



Car elevator



In the modern city, there are more and more cars. To solve the difficulty of parking, TENAU uses its mature elevator technology to make for cars a hindrance-free transportation, vertically through a design, that considers the performance and size of various cars.

Large load capacity

Large area of the car elevator ensures a normal load capacity of over 3 tons, capable of handling various cars.

Convenient door opening design

Front and rear door opening are available, making it easy for cars to move in and out.

Rated load

> 3t

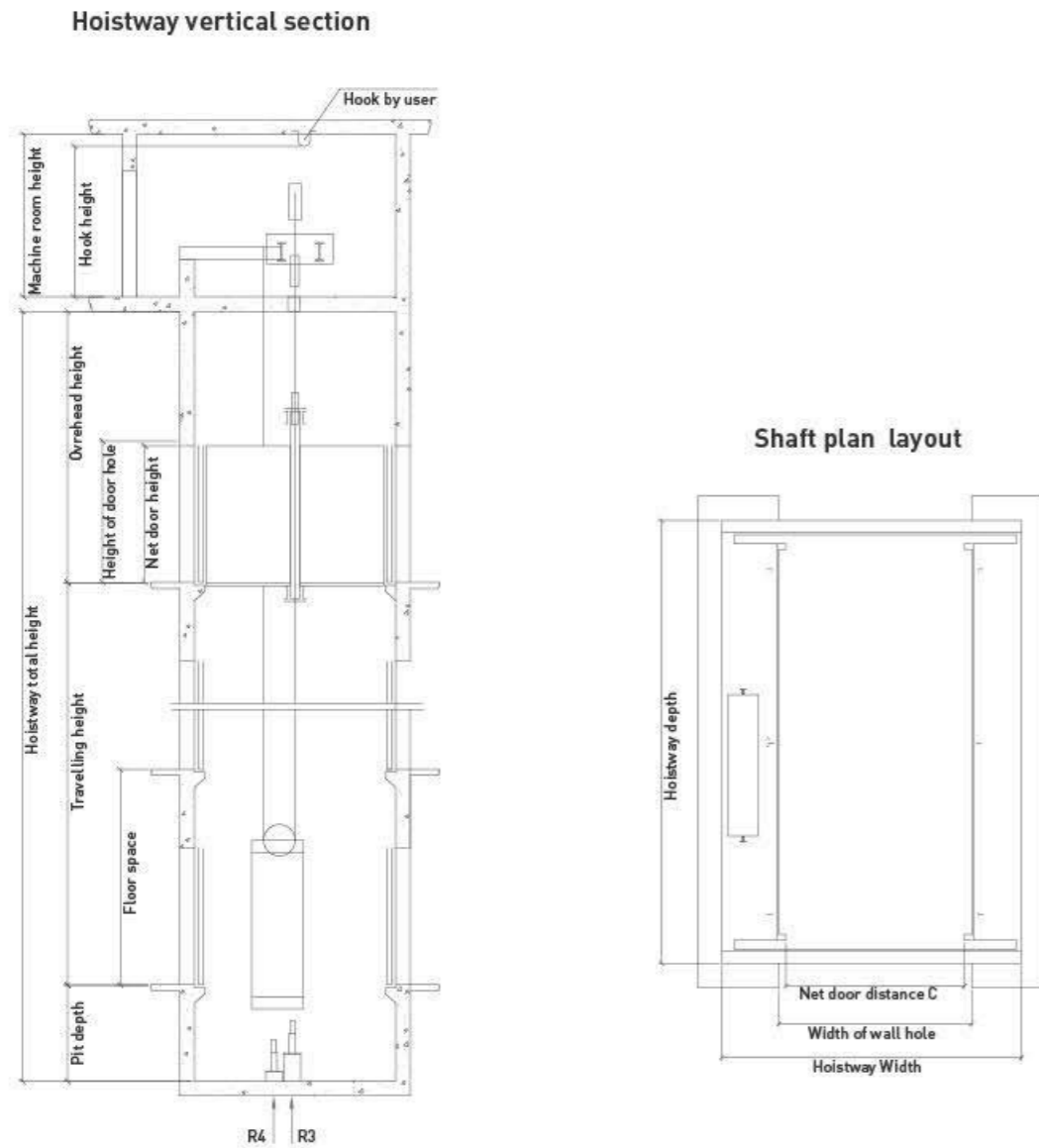
Save construction area

80%

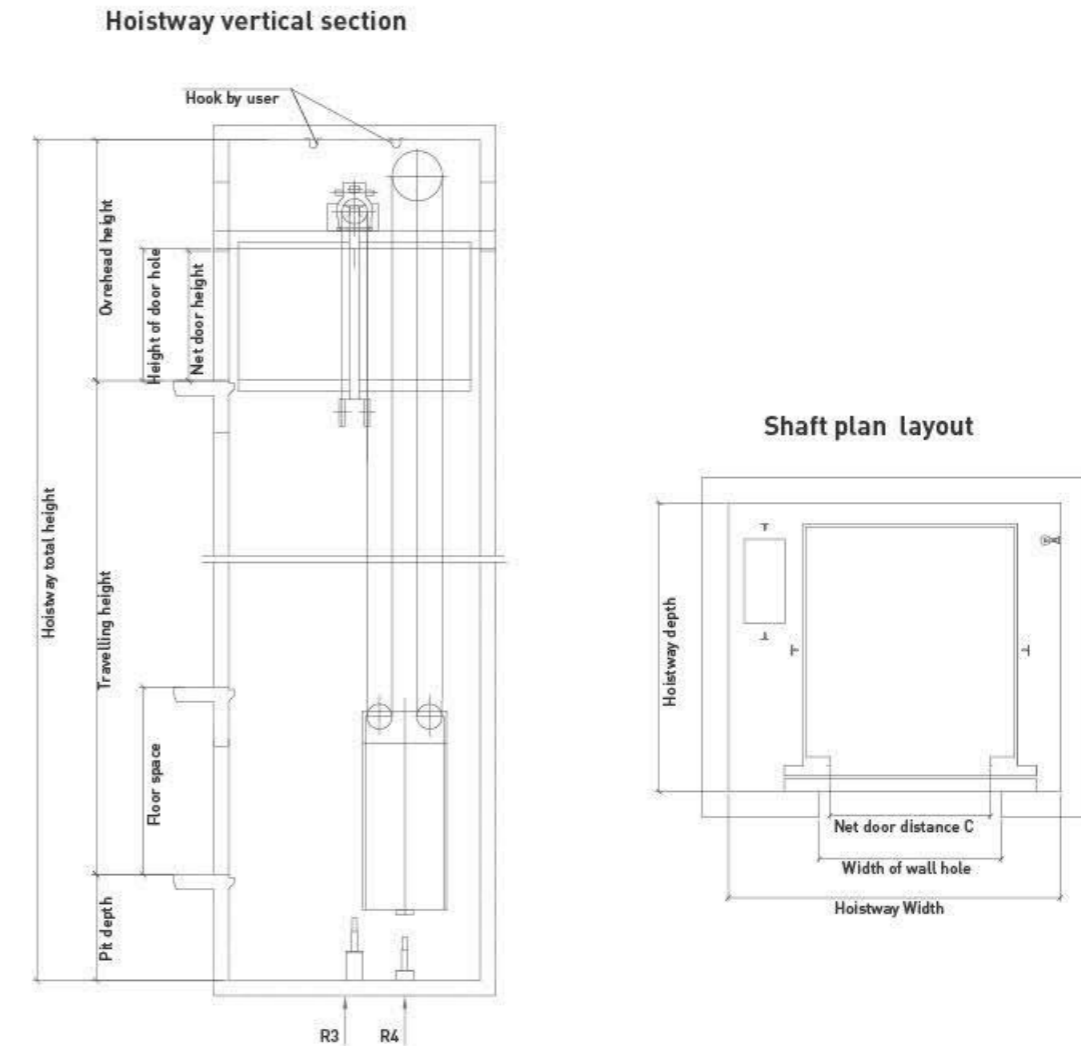
Reliable safety device

Safety device is mounted on the car ground of the elevator, which alerts the drivers on real time basis to ensure safe operation.

Car Elevator Construction Parameter



Machine Roomless Freight Elevator Construction Parameter



Car elevator parameters

Load(kg)	Speed(m/s)	Car dimension(mm)		Floor door(mm)		Hoistway size(mm)				Generator room with one elevator		
		AA	BB	M	HH	AH	BH	PP	OH	AM	BM	HM
3000	0.5	2700	5500	2500	2200	4200	6300	≥1700	≥4500	4200	6000	2800
5000	0.5	3400	7250	2800	2400	4700	7900	≥1700	≥4600	4700	7500	2800

Machine roomless freight elevator parameters

Load(kg)	Speed(m/s)	Car dimension(mm)	Door-opening size(mm)		Hoistway size(mm)	Overhead height	Pit depth
		Inner size AXB	Net door-opening	Net door height	XxY	(OH)	(PP)
1600	0.5	1600x2150	1400	2200	2700x2600	4300	1500
	1.0						
2000	0.5	1950x2150	1500	2200	3200x2800	4400	1500
	1.0						
3000	0.5	2000x2900	2000	2200	3600x3400	4500	1500
	1.0						

