



TOSHIBA

Toshiba Machine-room-less Elevators
Standard Passenger Elevator

SPACEL-III

For SNI standard

3rd Edition

For SNI standard

* Revised publication effective Jun. 2023

Safety Cautions

- Observance of relevant laws / regulations are required.
- Read the entire “Instruction Manual” carefully before use, for important information about safety, handling and operation.

TOSHIBA

Toshiba Elevator and Building Systems Corporation

72-34, Horikawa-cho, Saiwai-ku, Kawasaki
212-8585, Japan

Please enter the contents from the “Inquiry Input Form” in website.
<https://www.toshiba-elevator.co.jp/elv/infoeng/>

• The data given in this catalog are subject to change without notice.

GK-F221(0)-2306-500-2306(TD)

THE SOLUTIONS

COMPANY SOLUTIONS

Toshiba Elevator and Building Systems Corporation has built a framework which encompasses all aspects from system development to production, sales to marketing, installation, adjustment, maintenance and services in order to provide clients with the highest quality products and services.

Utilizing the comprehensive technological infrastructure developed by Toshiba Group in more than 140 years since its foundation, we aim to enhance the leading edge technology and quality that we used to develop the ultra high speed elevator, harnessing Toshiba's technological innovations to their fullest extent. To meet clients' expectations and requirements for safe and pleasant elevators as well as constantly pursuing further innovation and improvement. Furthermore, we are aiming to strengthen system development, production, enhancing sales channel and sales partnership to expand in the global market.

CONCEPT of SPACEL-III

Toshiba manufactures elevators by applying the latest technology and improved elevator development skills. SPACEL-III, the most recent high-end machine room less elevator, which incorporates various technologies to save energy and time, contributes to global environment.

Product Line-up

Expanded the applicable speed of the SPACEL-III.
We can comply with various needs such as building use, layout design, etc.

Scope of specification	Range of application
Passenger	8 ~ 28 persons
Rated load	550 ~ 1900 kg
Rated speed	1.0 ~ 3.0 m/s

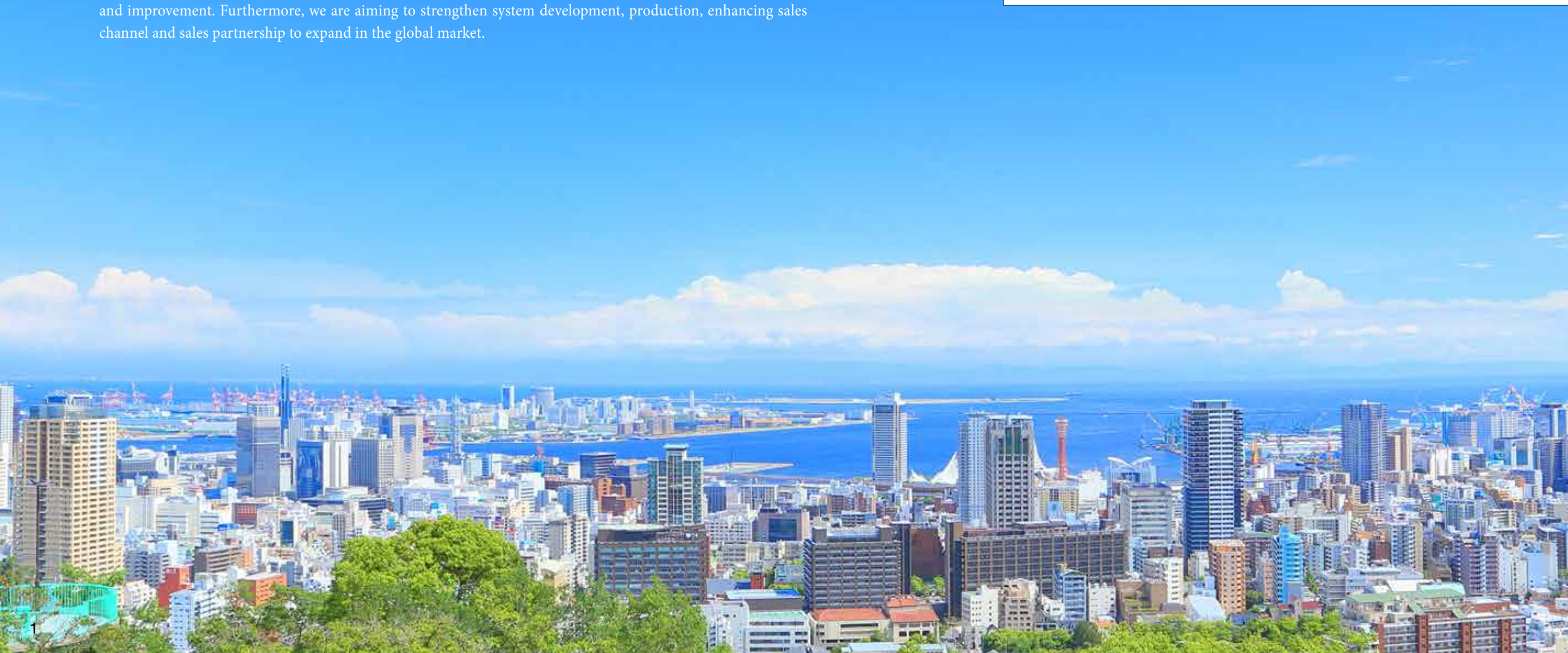
Note1: Note1: Applicable range of rated speed 3.0m/s are rated load 1100kg or more.

Note2: The above scope complies with SNI standard.

Rated speed (m/s)	3																			
	2.5																			
	2																			
	1.75																			
	1.5/1.6																			
	1																			
Rated load (kg)	550	680	900	1100	1160	1300	1360	1500	1700	1900										
Type	P8	P10	P13	P16	P17	P19	P20	P22	P25	P28										

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Functions

○ : STANDARD △ : OPTIONAL

Functions	Notes	Descriptions	
Operations	Simplex selective-collective fully automatic operation	Fully automatic operation by hall and car calls for single car	○
	Duplex selective collective fully automatic operation (Note 1)	Fully automatic operation for 2 cars in the same group	△
	3 or 4-car group supervisory control system (Note 1)	Fully automatic operation for 3 or 4 cars in the same group	△
	Group supervisory control system	For supervisory operation of groups of more than 4 cars, please contact us	△
	FLOORNAVI	Destination Control System	△
	Independent operation	Lift car separated from group control operation and responde to car call only	△
	Attendant operation	Operation by attendant by switch & button provided at service cabinet in COP	△
Safety Functions	Automatic landing function when system fails	When system failure occurs, the lift will automatically land at the nearest floor and the door will open for passengers to exit	○
	Automatic withdrawn from group control	If an elevator under a group supervisory operation fails to run for some reason, the elevator is cut out of the group and the other elevators automatically back up the faulty one to continue the group supervisory operation.	○
	Car inspection operation [INS]	During car inspection operation, the lift car will run at slowly speed without responding to hall call	○
	Overload protection	The car overload buzzer will sound to prevent overloading and the doors will remain open	○
	Fireman's operation (Note 2)	In the event of fire, when the Fireman's switch is activated, the designated lift will be ready for firemen to use	△
	Fire emergency operation	In the event of fire, all lifts will return to the designated floor and stop operation to allow passengers to exit	△
	Emergency operation indication at COP	In the event of an emergency, the emergency operation status will be displayed at COP	○
	Power failure emergency operation	In the event of power failure, all lifts will return to the designated floor by emergency power supply from the building to allow passengers to exit	△
	Automatic landing during power failure [TOSLANDER]	In the event of power failure,the lift will land at the nearest floor by emergency battery	△
	Earthquake emergency operation	In the event of an earthquake, the elevator will detect the seismic signal and land at the nearest floor	△
	In-car emergency lamp [Self-charging]	In the event of power failure, the in-car emergency lamp will be activated	○
	Emergency call button	A button for passenger to make an emergency call when they are trapped inside the lift	○
	Door open when lift car is overloaded	The doors will re-open when over load is detected, even during the closing of doors.	○
	Mechanical door safety	When the mechanical door safety device is touched by a passenger, the door will open	△
	Multi-beam door safety sensor [Or light curtain door safety sensor]	When the multi-beam door safety device senses a passenger, the door will open	△
	2 in 1 door safety [Multi-beam door safety + Mechanical door safety]	A combination of multi-beam door safety and mechanical door safety	○
Service Functions	Home landing	To reduce passenger waiting time, the lift will return to the designated floor and stand by	△
	Service floor cut-off selection [Software interface]	This is of the free setting type, where the elevator superintendent for every building is free to set and modify service cutt-off floors even after in use. This is the most appropriate type for such office buildings as their tenants are not yet fixed before completion.	△

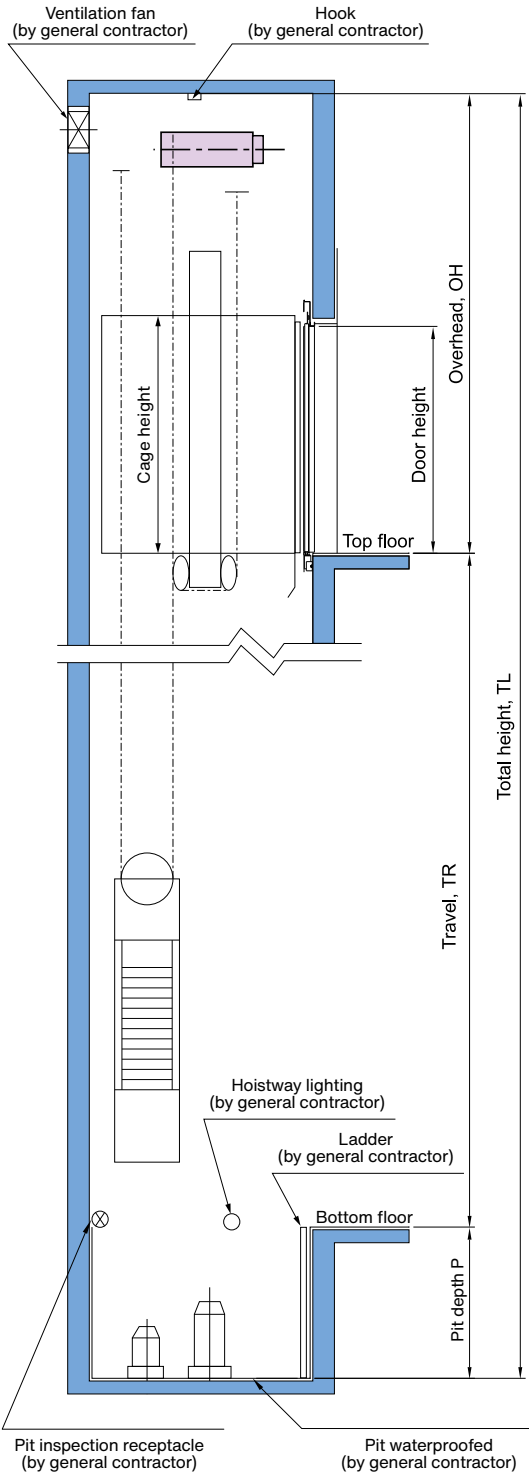
Notes

- 1: Not applicable to lift car with through door.
2: Fire emergency operation and fireman service cannot be applied simultaneously.
3: Standard function for 2-car operation or 3-car operation.
4: Car load is less than 150kg and there are five or more registered car calls.

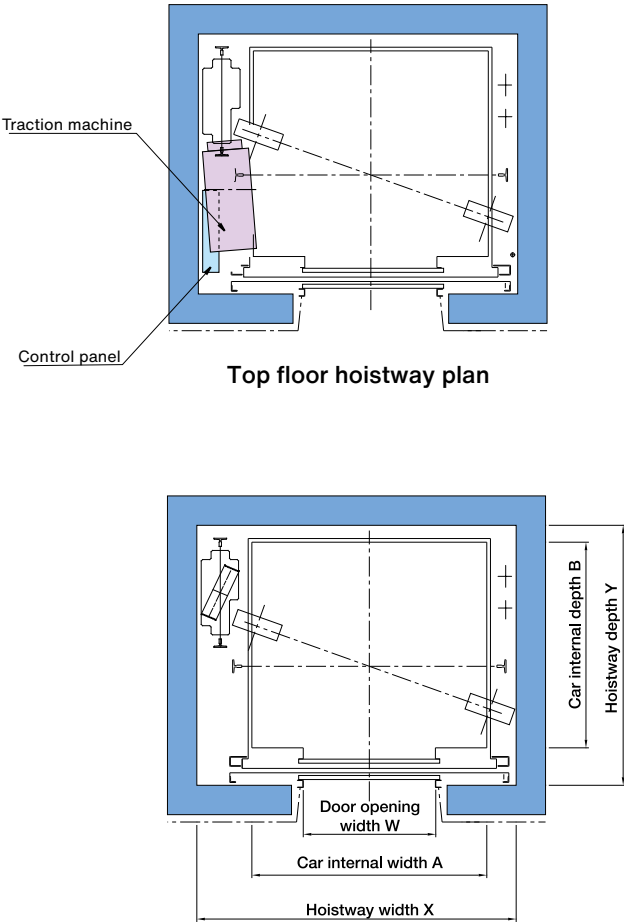
○ : STANDARD △ : OPTIONAL

Functions	Notes	Descriptions	
Service Functions	Service floor cut-off selection [Manual]	installing a switch or a timer on the supervisory panel, disables registration of car calls or hall calls for a basement floor's or an intermediate floors or intermediate floors thus engaging in non-stop (bypass) without servicing there.	△
	Full car bypass (Note 3)	When the lift car is full, the lift will bypass all hall calls and go straight to the designated floor	○
	Car call cancellation	The floor call can be cancelled from the COP by pressing the floor button twice within 3 second	○
	Nuisance call cancellation (Note 4)	Incorrect or nuisance floor calls can be cancelled to eliminate unnecessary operation	○
	Door repeated opening	When an obstacle is detected, the door will repeatedly open and close until the obstacle is removed	○
	Car indicator	Car indicator with the car operating panel	○
	Adjustable door opening time	Adjusts the door opening time to reflect building usage	○
	Door open extension button	Extends the door opening time	△
	Car chime	A chime installed in the car ceiling will sound when the lift arrives	△
	Hall chime	A chime installed in the lift lobby will sound when the lift arrives	△
	Car full load indicator	"Full Load" will display on the hall indicator when the lift car is full	○
	Hall lantern	The hall lantern will light up when the lift arrived	△
	Sub car operating panel	Additional car operating panel	△
	Out of service indicator	"Out of Service" will display on the hall indicator when the lift car is faulty	○
	Parking operation [Manual]	Parks the lift at designated floor by key-switch	○
	Parking operation [Automatic]	Parks the lift at designated floor autotmatically	△
	Car lighting automatic cut-off	When the lift is not in operation after a pre-determined period of time, the car light will turn off automatically	○
	Ventilation fan automatic cut-off	When the lift is not in operation after a pre-determined period of time, the ventilation fan will turn off automatically	○
	Door Open button lamp [For automatically cut-off car lighting]	The "Door Open" button will remain lit when the lift car light is turned off automatically	○
	Nuisance call cancellation at reversal	Cancel intentionally registered nuisance calls automatically in the reversal travel direction	○
	Multi-channel intercom	The intercom system can communicate with multi-stations simultaneously	○
	Designated floor stop operation	Automatically stops the lift at the designated floor for crime prevention purposes	△
	Card access system	Allows activation of the disnated floor call by IC card ※ Card Access System by others	△
	Speech synthesizer	Announces car operations	△
	Supervisory panel	Located in the building control room, etc. to monitor the status and control of each lift	△

Hoistway Layout



Hoistway section



Typical floor hoistway plan (W, D)

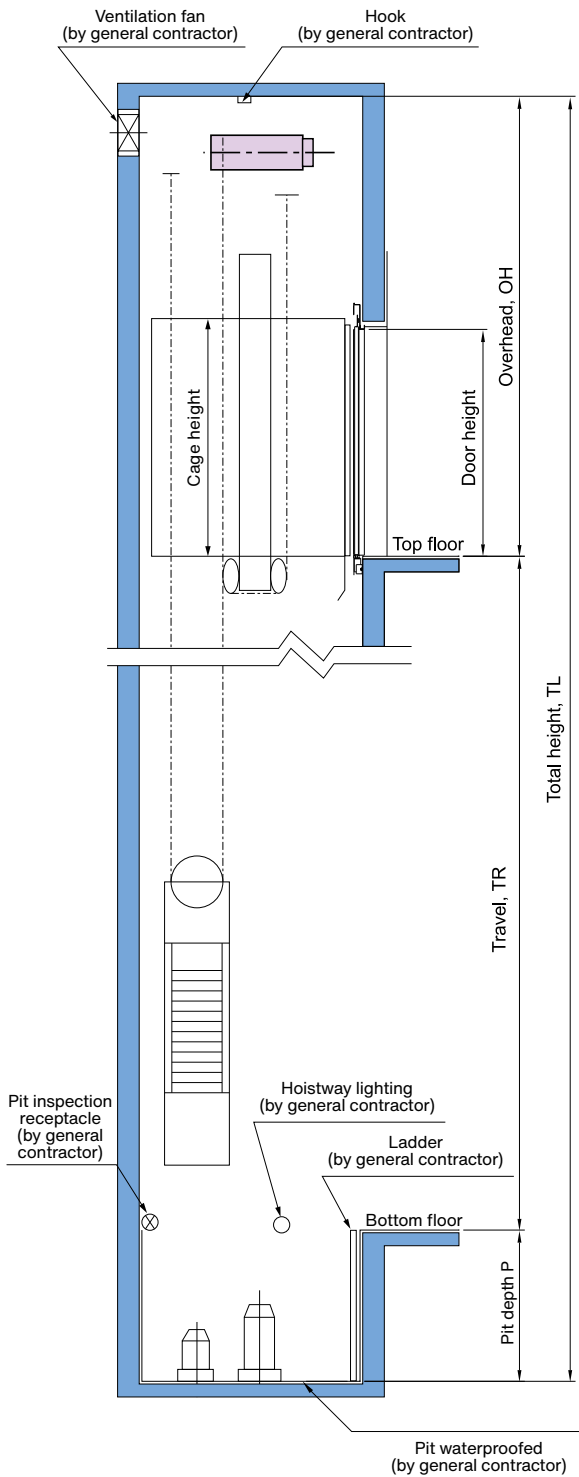
Specifications

Type	Nos. of Person	Capacity (kg)	Speed (m/s)	Cage size Internal (mm)		Door entrance (mm)		C/W	Hoistway size (mm)			Max. Service Stops (s)	Max. Travel (m)
				A×B	Height	Width	Height		X×Y	OH	P		
P8-CO60	W	550	1	1400×1100	2300	800	2100	Side	2190×1670	3820	1350	40	80
P8-CO96	W		1.6			900			2290×1670				100
P8-CO105	W		1.75			800			2190×1670	3970	1400		
P8-CO120	W		2			900			2290×1670	4020	1450		
P8-CO150	W		2.5			800			2190×1670	4220	1650		
						900			2290×1670	4270	2100		
P10-CO60	W	680	1	1400×1350	2300	800	2100	Side	2200×1780	3820	1350	40	80
P10-CO96	W		1.6			900			2300×1780				100
P10-CO105	W		1.75			800			2200×1780	3970	1400		
P10-CO120	W		2			900			2300×1780	4020	1450		
P10-CO150	W		2.5			800			2200×1780	4220	1650		
						900			2300×1780	4270	2100		
P13-CO60	W	900	1	1600×1400	2300	900	2100	Side	2400×1800			40	80
P13-CO96	W		1.6			1000			2500×1800	3820	1350		100
P13-CO105	W		1.75			1100			2600×1800				
P13-CO120	W		2			900			2400×1800	3970	1400		
P13-CO150	W		2.5			1000			2500×1800	4020	1450		
						1100			2600×1800	4220	1650		
						900			2400×1800	4270	2100		
						1000			2500×1800				
						1100			2600×1800				

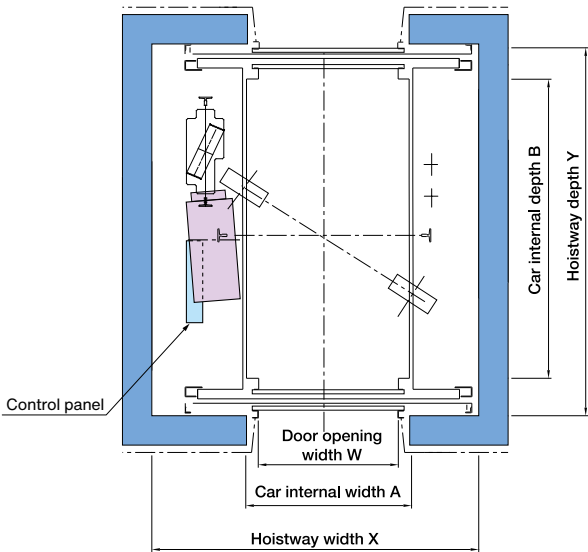
W: Wide car

- Note:**
- The above table complies with GB7588:2003 standards.
 - Please contact to our local distributor to check for other standards.
 - In case of travel is 40m or more, add 150mm to OH dimension and TC dimension at the above-stated dimension.
 - Hoistway dimensions take into account the error of up to 50 mm after the construction work.
 - The hoistway dimensions in chart are the minimum requirement.
 - The hoistway structure wall must be 150mm thick or more.
 - Piping, wiring and cables which is not relevant to elevator are prohibited inside the hoistway.
 - OH value in the chart is for standard ceiling. As for the non-standard cars, please consult our local distributor.
 - If the size of the hoistway is greater than the above sizes, OH will be larger. Please consult our local distributor.
 - If the location of Power source panel, Control panel and Electric power supply are changed. Please consult our local distributor.

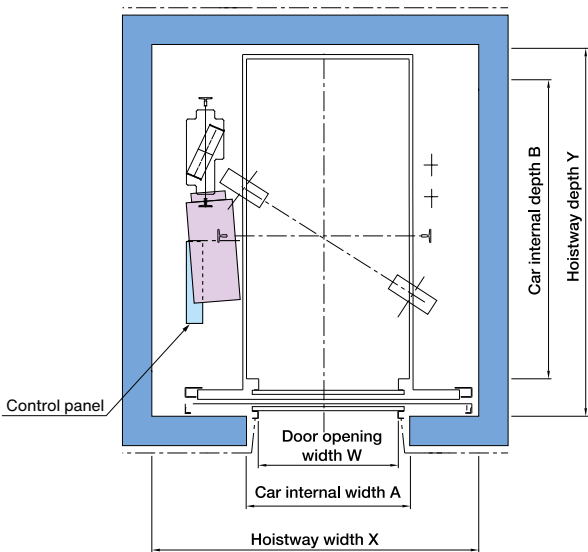
Hoistway Layout



Hoistway section



Typical floor hoistway plan (D2)



Typical floor hoistway plan (D)

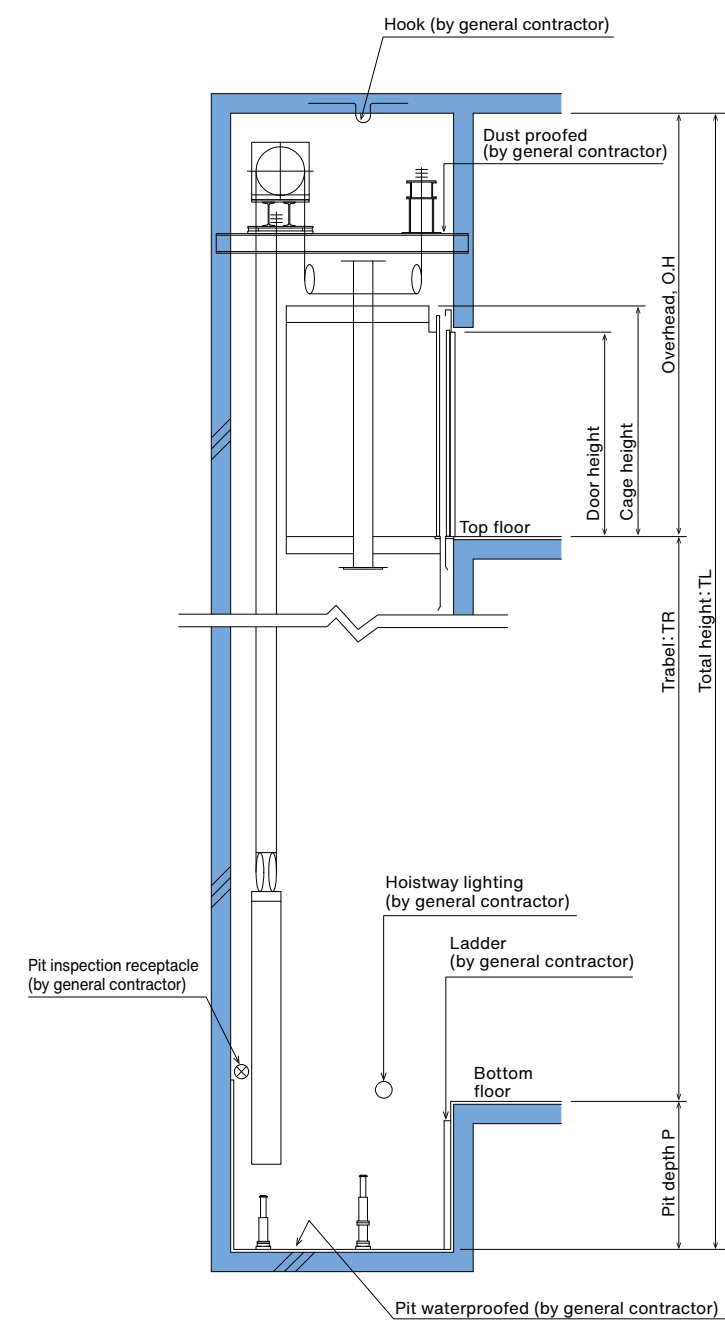
Specifications

Type	Nos. of Person	Capacity (kg)	Speed (m/s)	Cage size Internal(mm)		Door entrance (mm)		C/W	Hoistway size(mm)			Max. Service Stops(s)	Max. Travel (m)					
				A×B	Height	Width	Height		X×Y	OH	P							
P8-CO60	D	8	550	1	1100×1400	2300	800	2100	Side	1990×1760	3820	1350	40	100				
							900											
P8-CO96	D						1.6			800	1990×1760	3970			1400			
										900	2140×1760							
P8-CO105	D						1.75			800	1990×1760	4020			1450			
		900	2140×1760															
P8-CO120	D	2	800	1990×1760	4220	1650												
			900	2140×1760														
P8-CO150	D	2.5	800	1990×1760														
			900	2140×1760														
P10-CO60	D	10	680	1	1100×1700	2300	800	2100	Side	2000×2060	3820	1350	40	80				
										900			2140×2060		*			
P10-CO96	D						1.6			800	2000×2170	3970	1400	40				
										900	2140×2060			*				
P10-CO105	D						1.75			800	2000×2170	4020	1450	40				
										900	2140×2060			*				
P10-CO120	D						2			800	2000×2170	4220	1650	40				
										900	2140×2060			*				
P10-CO150	D						2.5			800	2000×2170	4270	2100	40				
										900	2140×2060			*				
P13-CO60	D	13	900	1	1100×2100	2300	800	2100	Side	2000×2460	3820	1350	40	80				
										900			2140×2460		*			
P13-CO96	D						1.6			800	2000×2570	3970	1400	40				
										900	2140×2570			*				
P13-CO105	D						1.75			800	2000×2460	4020	1450	40				
										900	2140×2460			*				
P13-CO120	D						2			800	2000×2570	4220	1650	40				
										900	2140×2570			*				
P13-CO150	D						2.5			800	2000×2460	4270	2100	40				
										900	2140×2460			*				
														900	2140×2570			

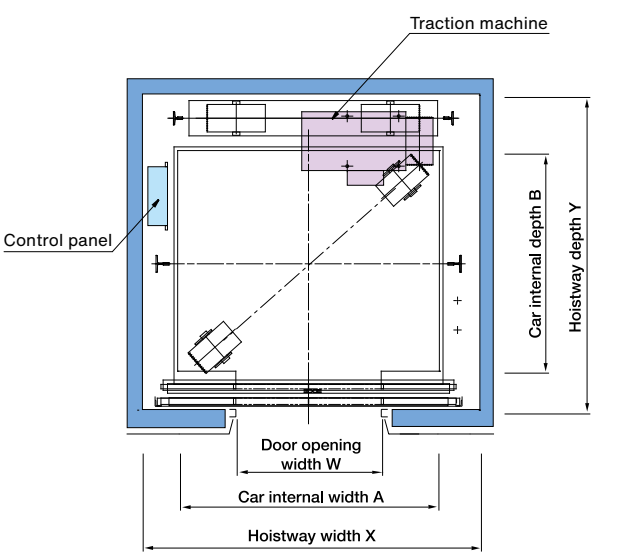
D: Deep car D2: Front and rear opening door *: Please consult our local distributor

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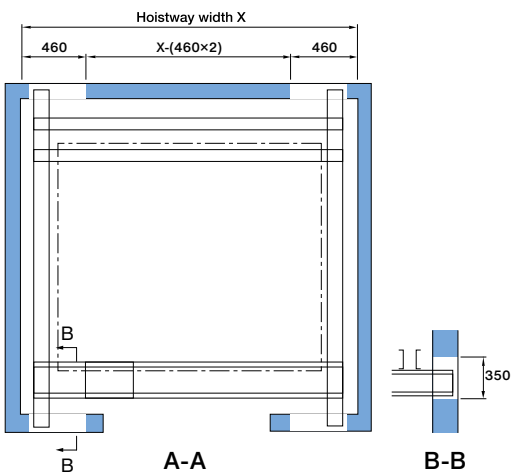
Hoistway Layout



Hoistway section



Top floor hoistway plan



Typical floor hoistway plan

Specifications

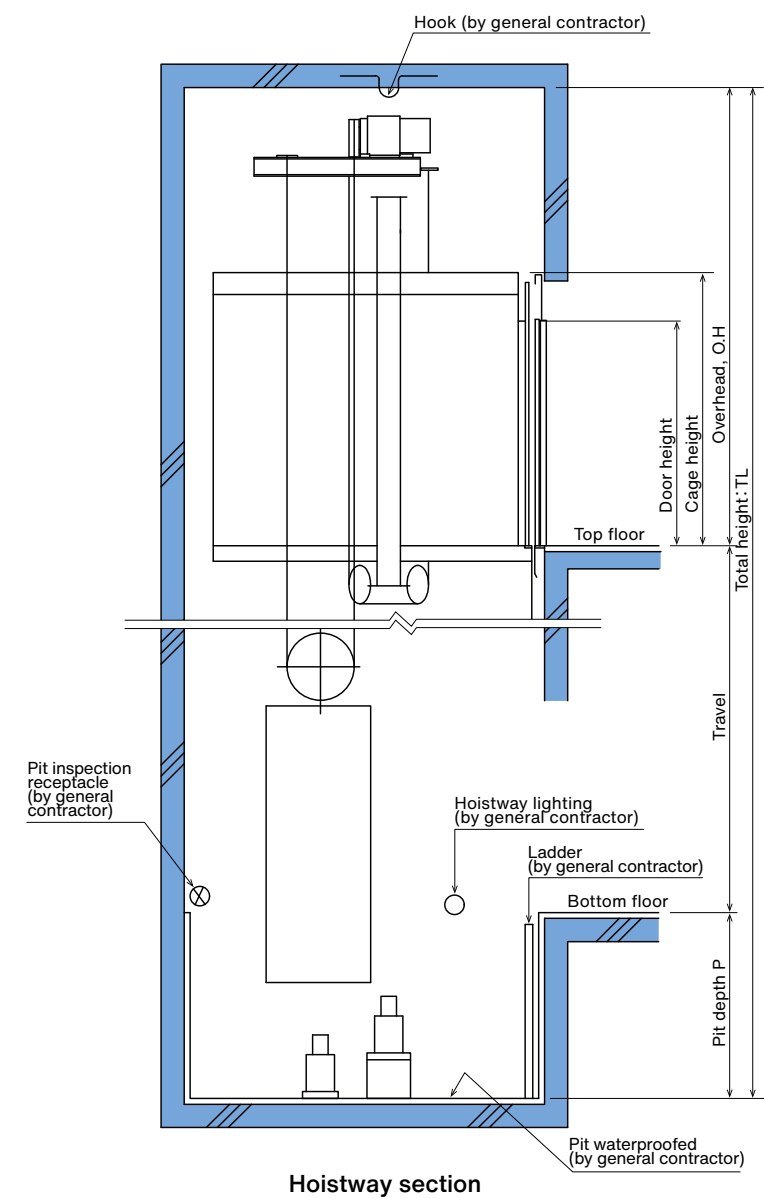
Type	Nos. of Person	Capacity (kg)	Speed (m/s)	Cage size Internal (mm)		Door entrance (mm)		C/W	Hoistway size (mm)			Max. Service Stops (s)	Max. Travel (m)
				A×B	Height	Width	Height		X×Y	OH	P		
P17-CO60	W	1160	1	1800×1500	2300	1000	2100	Rear	2450×2170	4280	1380	48	100
P17-CO96	W		1.6			1100			2550×2170	4450	1450		
P17-CO105	W		1.75			1000			2450×2170	4510	1480		
P17-CO120	W		2			1100			2550×2170	4600	1600		
P17-CO150	W		2.5			1000			2450×2170	4900	2000		
P17-CO180	W		3			1000			2600×2170	5350	2500		
P17-CO180	W		3			1100			2700×2170	5350	2500		
P19-CO60	W	1300	1	2000×1500	2300	1100	2100	Rear	2650×2170	4280	1380	48	100
P19-CO96	W		1.6			1100			2750×2170	4450	1450		
P19-CO105	W		1.75			1200			2700×2370	4510	1480		
P19-CO120	W		2			1100			2750×2370	4600	1600		
P19-CO150	W		2.5			1200			2700×2370	4900	2000		
P19-CO180	W		3			1100			2800×2170	5350	2500		
P19-CO180	W		3			1200			2800×2170	5350	2500		
P22-CO60	W	1500	1	2000×1700	2300	1100	2100	Rear	2700×2370	4280	1380	48	100
P22-CO96	W		1.6			1200			2750×2370	4450	1450		
P22-CO105	W		1.75			1100			2700×2370	4510	1480		
P22-CO120	W		2			1200			2750×2370	4600	1600		
P22-CO150	W		2.5			1100			2700×2370	4900	2000		
P22-CO180	W		3			1200			2750×2370	5350	2500		
P22-CO180	W		3			1100			2850×2370	5350	2500		
P25-CO60	W	1700	1	2100×1750	2300	1200	2100	Rear	2800×2420	4280	1380	48	100
P25-CO96	W		1.6			1200			2900×2420	4450	1450		
P25-CO105	W		1.75			1300			2850×2420	4510	1480		
P25-CO120	W		2			1200			2900×2420	4600	1600		
P25-CO150	W		2.5			1300			2950×2420	4900	2000		
P25-CO180	W		3			1200			3000×2420	5350	2500		
P25-CO180	W		3			1300			3000×2420	5350	2500		
P28-CO60	W	1900	1	2100×1950	2300	1200	2100	Rear	2800×2620	4280	1380	48	100
P28-CO96	W		1.6			1300			2900×2620	4450	1450		
P28-CO105	W		1.75			1400			2850×2620	4510	1480		
P28-CO120	W		2			1300			2900×2620	4600	1600		
P28-CO150	W		2.5			1400			2950×2620	4900	2000		
P28-CO180	W		3			1300			3000×2620	5350	2500		
P28-CO180	W		3			1400			3000×2620	5350	2500		

W: Wide car

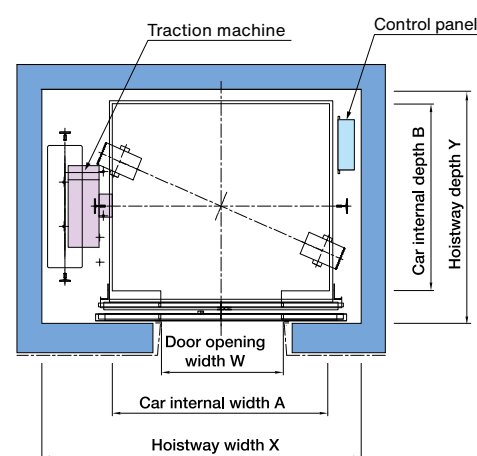
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- Hoistway dimensions take into account the error of up to 50 mm after the construction work.
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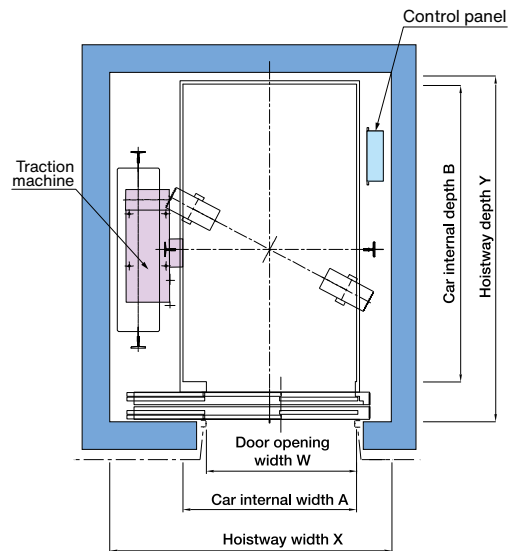
Hoistway Layout



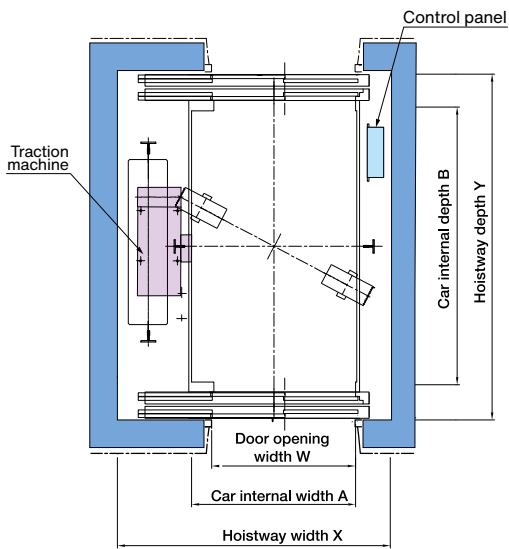
Hoistway section



Typical floor hoistway plan (W)



Typical floor hoistway plan (D)



Typical floor hoistway plan (D2)

Specifications

Type	Nos. of Person	Capacity (kg)	Speed (m/s)	Cage size Internal(mm)		Door entrance (mm)		C/W	Hoistway size(mm)			Max. Service Stops(s)	Max. Travel (m)	
				A×B	Height	Width	Height		X×Y	OH	P			
P17-CO60	W	17	1	1800×1500	2300	1000	2100	Side	2750×1870	3810	1350	48	100	
P17-CO96	W		1.6			1100			2850×1870	3960	1450			
P17-CO105	W		1.75			1100			2750×1870	4020	1500			
P17-CO120	W		2			1100			2850×1870	4110	1650			
P17-CO150	W		2.5			1000			2750×1870	4410	2050			
P17-CO180	W		3			1000			2850×1870	4880	2900			
P17-CO60	W	17	1	2000×1400	2300	1100	2100	Side	2950×1830	3810	1350	48	100	
P17-CO96	W		1.6			1200				3960	1450			
P17-CO105	W		1.75			1100				4020	1500			
P17-CO120	W		2			1100				4110	1650			
P17-CO150	W		2.5			1100				4410	2050			
P17-CO180	W		3			1100				4880	2900			
P19-CO60	W	19	1	2000×1500	2300	1100	2100	Side	2950×1870	3810	1350	48	100	
P19-CO96	W		1.6			1200				3960	1450			
P19-CO105	W		1.75			1100				4020	1500			
P19-CO120	W		2			1100				4110	1650			
P19-CO150	W		2.5			1100				4410	2050			
P19-CO180	W		3			1100				4880	2900			
P22-CO60	W	22	1	2000×1700	2300	1100	2100	Side	2980×2110	3810	1400	48	100	
P22-CO96	W		1.6			1200				3080×2110	3960			1500
P22-CO105	W		1.75			1100				2980×2110	4020			1550
P22-CO120	W		2			1100				3080×2110	4110			1700
P22-CO150	W		2.5			1100				2980×2110	4410			2100
P22-CO180	W		3			1100				3130×2110	4880			2900
P25-CO60	W	25	1	2100×1750	2300	1200	2100	Side	3030×2130	3810	1400	48	100	
P25-CO96	W		1.6			1200				3960	1500			
P25-CO105	W		1.75			1100				4020	1550			
P25-CO120	W		2			1100				4110	1700			
P25-CO150	W		2.5			1100				4410	2150			
P25-CO180	W		3			1100				4880	2900			
P28-CO60	W	28	1	2100×1950	2300	1200	2100	Side	3030×2310	3810	1400	48	100	
P28-CO96	W		1.6			1200				3960	1500			
P28-CO105	W		1.75			1100				4020	1550			
P28-CO120	W		2			1100				4110	1700			
P28-CO150	W		2.5			1100				4410	2150			
P28-CO180	W		3			1100				4880	2900			
P17-2S60	D	17	1	1200×2300	2300	1100	2100	Side	2180×2760	3810	1350	48	100	
P17-2S96	D		1.6			1200				3960	1450			
P17-2S105	D		1.75			1100				4020	1500			
P17-2S120	D		2			1100				4110	1650			
P17-2S150	D		2.5			1100				4410	2050			
P17-2S180	D		3			1100				4880	2900			
P16-2S60	D2	16	1	1200×2200	2300	1100	2100	Side	2380×2860	3810	1350	※	100	
P16-2S96	D2		1.6			1200				3960	1450			
P16-2S105	D2		1.75			1100				4020	1500			
P16-2S120	D2		2			1100				4110	1650			
P16-2S150	D2		2.5			1100				4410	2050			
P16-2S180	D2		3			1100				4880	2900			
P22-2S60	D	22	1	1400×2400	2300	1200	2100	Side	2380×3070	3810	1400	48	100	
P22-2S96	D		1.6			1200				3960	1500			
P22-2S105	D		1.75			1100				4020	1550			
P22-2S120	D		2			1100				4110	1700			
P22-2S150	D		2.5			1100				4410	2100			
P22-2S180	D		3			1100				4880	2900			
P20-2S60	D2	20	1	1400×2300	2300	1200	2100	Side	2180×2970	3810	1400	※	100	
P20-2S96	D2		1.6			1200				3960	1500			
P20-2S105	D2		1.75			1100				4020	1550			
P20-2S120	D2		2			1100				4110	1700			
P20-2S150	D2		2.5			1100				4410	2100			
P20-2S180	D2		3			1100				4880	2900			

Works by Others

Works below are not included in elevator installation works:

► Hoistways

1. Hoistway construction and fire-proofing, and opening for jambs, indicators and push-buttons, etc.
Please note that chipping or padding work is required according to the necessity, in case the error of the structure is 30 mm or over.
2. Installation of separating beams, intermediate beam, back beam and lateral beams (if necessary).
3. Installation of the base plate for each floor and of bed steel for furnishing the equipment related to landing entrance, in case of hoistways of steel structure of PC structure.
4. Fire-proofing of steel frame material in steel structured hoistways, and fire-proofing around landing entrances (if necessary).
5. Finishing of walls and floors, etc., around entrances, after furnishing equipment related to landing entrances.
6. Furnishing of base steel or others for furnishing rail brackets, especially where the floor height is high (if necessary).
7. Installation of the entrance or the gangway for pit inspection (if necessary).
8. Water-proofing of the pit (including drainage if necessary).
9. Rearrangement of the building body in case that there are some spaces to be used under the pit.
10. Installation of emergency exits for rescue purposes in the event there are floors at which the elevator does not stop and installation of a fascia plate.
11. Shelter equipment from rain at landing entrances directly contacting to the air in the place like roof.
12. Installation of hooks or beams on top of the elevator shaft.
13. Installation of lighting in hoistway (if necessary).
14. Installation of vent opening at the top of shaft (if necessary).
15. Installation of a net or wall to prevent falling into the pit (in cases where the pit level is different.)
16. All related to the building structure other than works above.

► Works for Equipment

1. Wiring of the power supply for motors and that for lighting equipment, and of grounding to power source panels of elevators in the Elevator shaft.
2. Wiring of the power supply to the supervisory panels.
3. Piping and wiring of intercoms outside hoistway and of others necessary for elevators.
4. Supply and installation of switching devices for emergency power supply in case of power failure and two pairs of relay contacts for normal / emergency power identification, and their piping and wiring (if necessary).
5. Piping and wiring of supervisory panels, alarm panels and inter-communication systems, etc., outside hoistways.
6. Furnishing of receptacles for inspection in pits.

► Temporary Works

It is required to arrange the following matters:

1. To secure the site office for installation work and the stock yard for materials without charge.
2. Enclosure to be used during the installation work.
3. Supply of electric power for installation work and the trial operation for adjustment.
4. Security of enough passage for carrying heavy goods.
5. On use of elevator for the construction work of the building, It is required to make contract with a separate written estimate.

Note

During equipment planning of elevators, please take the following items into consideration:

1. Provide power facility so that voltage regulation of the power supply at the receiving terminals in the hoistway is kept within $\pm 10\%$ for the motor, and $\pm 2\%$ for the lighting equipments.
2. In the hoistways, please prevent the temperature from exceeding 40°C and humidity from exceeding 90% (monthly mean) and 95% (daily mean).
3. Please do not allow any chemically toxic gas or an excessive amount of dust to enter into the hoistways, as these can corrode the metal or electrical contacts.

When asking for an estimate,
please inform us of the following:

1. Building name and address.
2. Desired type and number of set.
3. Number of stops.
4. Floor height.
5. Voltage and frequency of main power supply.
6. Desired completion date.

Memo