

TOSHIBA

TOSHIBA MACHINE-ROOM-LESS ELEVATORS STANDARD PASSENGER ELEVATOR



3rd Edition For GB standard

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.

* Revised publication effective Sep. 2021

GK-F207(1)-2109-500-2109(TD)

N. Andre

For GB standard



TOSHIBA ELEVATOR AND BUILDING SYSTEMS CORPORATION

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 compact machine room 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	$8\sim 26~{ m persons}$
Rated load	$630\sim 2000~{ m kg}$
Rated speed	$1.0\sim2.5~m/s^{*Note1}$

Note1: Applicable range Rated load 1600 or less for rated speed 2.5 m/s. Note2: The above scope complies with GB7588:2003





Contents

The Solutions	
Company Solutions	P.1
Concept of SPACEL-III ······	P.2
Technology	
Technology Safety Function	P.3
Safety Function	P.5
Energy Saving & Environment	P.9
Expansion of variations	
in car ceiling design	P.13
Car Design	
OFFICE RESIDENCE	P.15
RESIDENCE	P.17
HOTEL]	P.19
SHOP	P.21
Hall Design	
Hall Decoration Item Variation	P.23
Operation Systems	P.31
Functions	P.49
Hoistway Layout/	
Hoistway Layout/ Specifications	P.51
Works by Others	P.61
Global Network	P.63
	2



New Technology

High-performance Small Sized PMSM Traction Machine

- ◆ Compact PMSM (Permanent Magnet Synchronous Motor) for space saving.
- ♦ Over 30% less power consumption (compared to conventional electric motor).
- Gearless traction without gear oil for low vibration, low noise and better environmental conservation.

High Performance Control Systems

A high performance CPU is adopted for control systems. This control system enables to reduce standby electricity, automatic shutoff system for lightings and ventilation to contribute furthermore reduction of electricity.

Energy Regeneration System OPTIONAL

An energy regeneration device feeds energy back to the power grid while the traction machine is under power generation to achieve high-efficiency energy utilization, which results in over 38% energy conservation (with the assumption of 1050kg, 1.75m/s, 12-hour operation per day, 25 days per month).



Building

Use of Roller Guide OPTIONAL

A roller guide is used instead of a conventional sliding guide shoe. Features include:

- ♦ Comfort: Using the successful vibration damping solution from the high-end elevator type, riding comfort is further improved after roller guide is mounted on the car.
- ♦ High efficiency: Visible improvement of the mechanical efficiency with lower friction and energy consumption.
- Environmental conservation: Lubrication oil and lubrication unit are eliminated and replaced by a long-life rubber roller to reduce environmental pollution.









Safety Function

Unintended Car Movement Protection OPTIONAL

A traction drive elevator shall include means to prevent uncontrolled movement of the elevator away from the landing with neither the landing nor the car doors in the locked position. The Elevator shall detect uncontrolled movement of the car away from the landing and stop no more than 1200mm after as measured from the landing floor sill. Before operation, the uncontrolled car movement protection system means for an ascending elevator, the clearance between the landing door floor sill and the apron of the stopped elevator shall not exceed 200mm. In additional, uncontrolled movement protection means the horizontal distance between the sill or entrance frame of the stopped elevator and the wall of the well, from the landing floor sill to 1200mm downward for a descending elevator.

Car Door Lock OPTIONAL

Every car door shall be mechanically locked by at least 7mm such that it can only be opened in the unlocking zone of a landing. The lift operation shall automechanically depend on the locking of the car door. This locking shall be proved by an electrical safety device to confirm the horizontal distance between the well wall and the sill or entrance frame of the car is within150mm.

Ascending Car Overspeed Protection

A device to prevents an elevator ascending to the elevator shaft top beyond the rated speed due to a device like an electromagnetic brake or control unit. It monitors the speed of the upper direction mechanically by a governor, then cut off the power supply and safety circuit by an overspeed detecting switch when the speed exceeds the rated speed more than 1.3 times. The elevator shall be stopped by triggering the double brake when overspeed occurred.

Multi-beam Door Safety OPTIONAL

The photoelectric cell detects passengers in the doorway and reopens closing doors.





Safety Function

Automatic Landing in Power Failure

In case of a power failure, backup lamps are automatically lighted up in the cars, while the system's operation is switched to the elevator system's own battery powered inverter. Cars stranded between floors are taken to the nearest floor; otherwise, doors are opened and passengers are let out. The doors automatically open in case the car stops at any point that is not between floors but where the doors can be opened. (Note: Overridden by any similar backup or safety systems installed in compliance with safety codes.)

Earthquake Emergency Operation

When the system's seismic sensor installed in the elevator shaft detects an S-wave (the secondary seismic wave and the main shock of an earthquake) that exceeds the pre-set threshold, the system takes control with emergency procedures. "Earthquake" emergency signs lighted up in all cars, all cars are taken immediately to the nearest floor, doors are opened and passengers are instructed to alight.

Fire Emergency Operation

This emergency operation is automatically triggered in case of a fire, when a fire alarm button is actuated, or when a Fire/Smoke Detector detects an abnormality. All hall calls and floor selections are cancelled, passengers are informed of the emergency procedure with a "Fire" sign and a voice announcement and all cars are sent directly to the emergency exit floor. Doors open at the emergency floor and passengers are guided to safety.



 $\ensuremath{\overset{\scriptstyle\frown}{_{\scriptstyle\scriptscriptstyle \rm M}}}\xspace$ Above flow chart is representable example



%Above flowchart is representable example



 $\ensuremath{\overset{\scriptstyle\bullet}{\times}} Above \ flow chart \ is \ representable \ example$



Energy Saving & Environment

Toshiba Group and the SDGs

The main plank of the "Toshiba Group Basic Commitment" is "Committed to people, Committed to the Future.". This expresses Toshiba Elevator and Building Systems is unwavering determination to contribute to the development of society through its business, and is consistent with the direction of the SDGs, which aim to realize a sustainable society. Acting in good faith in our daily activities, and with a passion to make the world a better place, looking to the future beyond the next generation, and to create that future with our stakeholders-inspired by these ideas, Toshiba Elevator and Building Systems has and will continue to bring together the creativity and technological capabilities it has cultivated to confront social issues that are becoming more complicated and serious, and to turn on the promise of a new day.

Note: Toshiba Elevator and Building Systems is working on business activities by extracting 11 items that can be promoted from all 17 types of SDGs goals.



Products and functions adopted to reduce power consumption

Suppress power consumption by reducing standby power, commercialization of the regenerative power function, adoption of LED lighting.

LED Lightings

Under equal brightness, an LED lighting system only consumes 10% of electrical with comparison of an incandescent lamp and 50% of an fluorescent lamp. (part of the ceiling)





Energy Saving & Environment

Providing environmentally conscious products

Toshiba elevator group is promoting the development of environmentally conscious products, which involves environmentally conscious product design, assessing the environmental impact of products and disclosing the environmental performance of products. Products are developed in compliance with the updated voluntary environmental performance standards.

Product assessment and voluntary environmental standards for products

In developing products, we assess them across their life cycles from manufacturing, logistics and use to disposal and recycling to conduct product development and reduce the environmental impacts on the global environment.

Whereas product assessment is used to confirm the minimum necessary environmentally conscious requirements for product development, Voluntary Environmental Standards for Products have been established in the Toshiba elevator group to create highly environmentally friendly products and products complying with the same are released as environmentally conscious products.

Reducing hazardous materials

[Reduction of lead use] By changing the method of tying rope, the use of lead can be eliminated or reduced. [Employing LED lightings] By employing LED light, various materials used for light became mercury free.

Lead-free Design of Base Plate, RoHS Compliance and Elimination of Specific Chemical Substances (15 Classifications)

Continuous concern over RoHS compliance, eliminating 15 classifications of specific chemical substances and using the lead-free technique for main circuit boards.



Expansion of variations in car ceiling design

Suitable for harmonization of a wide variety for building applications and concepts. Expanding the lineup of ceiling designs utilizing LED lighting All ceiling lighting uses LED lighting to take environmental measures such as long life and energy saving.



The actual product colors may vary slightly from those printed colors in this catalog.



OPTIONAL PRM-1

Front side view



Back side view



Ceiling design	PRM-1
Car side panel (Return panel)	Vibration finish stainless steel
Car side panel (Side panel)	Black color hairline finish stainless steel and Vibration finish stainless steel
Car side panel (Rear panel)	Black color hairline finish stainless steel and Mirror finish stainless steel
Kick plate	Hairline finish stainless steel
Car door	Black color hairline finish stainless steel
Car floor	Marble tile (JQ-1013)
СОР	POP-G1L-104C
Indicator	10.4inch LCD
Handrail	Stainless steel flat type hand rail
Remark	Applies to models with a capacity of 1150kg or more.

Design variations

The publication of this page is an example of design. Please refer to the "DESIGN SELECTION" catalog for each the condition and other designs.















DLX-24

Front side view



Back side view



Ceiling design	DLX-24 with pattern C
Car side panel (Return panel)	Vibration finish stainless steel
Car side panel (Side panel)	Rose gold color hairline finish stainless steel
Car side panel (Rear panel)	Rose gold color hairline finish stainless steel and Mirror finish stainless steel
Kick plate	Nil
Car door	Mirror finish stainless steel
Car floor	Vinyl tile (TSF-1C)
СОР	COP-G1L-57B
Indicator	5.7inch LCD
Handrail	Stainless steel round type hand rail

Design variations

The publication of this page is an example of design. Please refer to the "DESIGN SELECTION" catalog for each the condition and other designs.















DLX-31

Front side view



Back side view



Ceiling design	DLX-31
Car side panel (Return panel)	Black color hairline finish stainless steel
Car side panel (Side panel)	Black color hairline finish stainless steel and Mirror etching finish stainless steel
Car side panel (Rear panel)	Black color hairline finish stainless steel and Mirror etching finish stainless steel
Kick plate	Nil
Car door	Mirror etching finish stainless steel
Car floor	Marble (JQ-1012)
СОР	POP-G1L-84C
Indicator	8.4 inch LCD
Handrail	Nil

Design variations

The publication of this page is an example of design. Please refer to the "DESIGN SELECTION" catalog for each the condition and other designs.

OPTIONAL DLX-24















OPTIONAL **DLX-22**

Front side view



Back side view



Ceiling design	DLX-22
Car side panel (Return panel)	Vibration finish stainless steel
Car side panel (Side panel)	Vibration finish stainless steel and Mirror finish stainless steel
Car side panel (Rear panel)	Vibration finish stainless steel and Mirror finish stainless steel
Kick plate	Nil
Car door	Mirror finish stainless steel
Car floor	Marble (JQ-1013)
СОР	POP-G1L-57B
Indicator	5.7 inch LCD
Handrail	Nil

Design variations

The publication of this page is an example of design. Please refer to the "DESIGN SELECTION" catalog for each the condition and other designs.













The actual product colors may vary slightly from those printed colors in this catalog.



Hall Decoration Item Variation

The combination of elevator hall equipment and specifications extends design. It can be easily harmonized with the entrance design of the building.



Hall design 1 OPTIONAL

Hall jamb	Wide type jan Hairline finisł
Hall door	Hairline finish
Hall transam	Hairline finish
Hall sill	Hardened alu
Hall indicator	Nil
Hall button	HB-G1K
Hall lantern	HL-G1-O





HB-G1K

Note : In the case of jamb with transom, fire-proof specification cannot be applied to the transom. The actual product colors may vary slightly from those printed colors in this catalog.



Hall design 6 STANDARD



Hall design 7



HL-G1-O

Hall design 2 OPTIONAL

Hall jamb	Wide type jamb Painted steel panel (1NS)
Hall door	Painted steel panel (1NS)
Hall transam	Nil
Hall sill	Hardened aluminium
Hall indicator	HI-G34-O
Hall button	HB-G1K
Hall lantern	Nil





Hall design 3	OPTIONAL
---------------	----------

Hall jamb	Wide type jamb Painted steel panel (66YS)
Hall door	Painted steel panel (66YS)
Hall transam	Nil
Hall sill	Hardened aluminium
Hall indicator	Nil
Hall button	HIB-G1NL
Hall lantern	HL-G1-O



HIB-G1NL









HL-G1-O

Hall design 4 OPTIONAL

Hall jamb	Wide type jamb Hairline finish stainless steel
Hall door	Painted steel panel (62YS)
Hall transam	Nil
Hall sill	Hardened aluminium
Hall indicator / Hall button	HIB-G1L-43B
Hall lantern	Nil



A 8





Hall jamb	Wide type jamb Painted steel panel (114PBS)
Hall door	Painted steel panel (114PBS)
Hall transam	Nil
Hall sill	Hardened aluminium
Hall indicator	HI-G1-O
Hall button	HB-G1K
Hall lantern	Nil









HB-G1K



Hall design 6 STANDARD

Hall jamb	Narrow type jamb Painted steel panel (77GS)
Hall door	Painted steel panel (77GS)
Hall transam	Nil
Hall sill	Hardened aluminium
Hall indicator / Hall button	HIB-G1N
Hall lantern	Nil



HIB-G1N

8



Hall design 7	OPTIONAL

Hall jamb	Wide type jamb Hairline finish stainless steel
Hall door	Hairline finish stainless steel
Hall transam	Nil
Hall sill	Hardened aluminium
Hall indicator	HI-G1L-57B
Hall button	HB-G1K
Hall lantern	Nil



HI-G1L-57B







HB-G1K

OPERATION SYSTEMS

8

9999999

8

TOSHIBA

FOR PASSENGER 15 PERSONS 1150 kg

•

0 0



Car Operation Panel: POP type

XNote: Applicable to Wide Car type models

Car Operation Panel







KB-3 (Orange light)

PRM-1

Indicator





Car Operation Panel







OPTIONAL The actual product colors may vary slightly from those printed colors in this catalog.

Car Operation Panel: POP type

XNote: Applicable to Wide Car type models

Car Operation Panel





7 inch LCD Segment



Button

DLX-31



Car Operation Panel





7 inch LCD Segment

SL-P1



Button



GS-5B-WT



Car Operation Panel: FCOP type

XNote: Applicable to Deep Car type models

Car Operation Panel







DLX-24

ors are op

8



Car Operation Panel





ISB	торнора
Ha Hoseda N 19200	tas Australia National
÷,	
\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	15 13 14 11 12 9 10 7 8 5 6 3 4 1 2 •• ••
	۵
FCOP-G1L-70S	FCOP-G1L OPTIONAL

The actual product colors may vary slightly from those printed colors in this catalog.

Car Operation Panel: FCOP type

℅Note: Applicable to Deep Car type models

Car Operation Panel





7 inch LCD Segment



Button

TL-S2



Car Operation Panel





7 inch LCD Segment



Button



GS-5B-WT

Car Operation Panel: COP type

*Note: Applicable to all models

Car Operation Panel







KB-7 (Orange light)



Car Operation Panel



TOSHIBA

Ť

8

-

-



Hall Indicator Button: HIB type

Hall Indicator Button



LCD Hall Indicator

Toshiba's universal designed 4.3 inch LCD hall indicators are capable of displaying various announcements such as emergency operation, maintenance status, etc.

4.3 inch LCD display



4.3inch LCD segment





Hall Indicator Button

4.3 inch LCD segment



LED Dot Matrix





LED Dot Matrix

*Note: A white color or orange color can also be selected for the LED light.



Detail of display









The actual product colors may vary slightly from those printed colors in this catalog.

Hall Indicator

Hall Indicator OPTIONAL



HI-G1-O





LED Dot matrix

Hall Lantern

Hall Lantern OPTIONAL

*Note: A white light or orange light can also be selected for the lantern light.





HL-G2-W (White light)

LCD Hall Indicator OPTIONAL

5.7 inch large LCD hall indicator is capable of displaying visuals linked from car security camera.







Hall Button OPTIONAL





HL-G3-O (Orange light)



HL-G4-O (Orange light)



G1K series

3mm

Car Position Indicator

Large LCD Indicator for Car Operation Panel OPTIONAL

These 10.4 inch and 8.4 inch LCD indicators are capable of displaying in the elevator's various conditions (emergency operations, maintenance status) in large icons and letter in highly visible colors.

10.4 inch display for car operation panel

General car display (Without monitoring)



Elevator status nch direction



-Elevator Status -Direction - Floor - Door Operation

5.7 inch display for car operation panel

General car display





7.0 inch LCD segment



Display under controlled status





▲ With monitoring

▲ Fire emergency operation





TOSHIBA \mathbf{T} 12

8.4 inch display for car operation panél

With video



LED Dot matrix



Controlled status



Functions

 \bigcirc : STANDARD \triangle : OPTIONAL

Functions	Notes	Descriptions								
	Simplex selective-collective fully automatic operation	Fully automatic operation by hall and car calls for single car	0							
	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								
Operations	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								
	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	0							
	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.	0							
	Car inspection operation [INS]	During car inspection operation, the lift car will run at slowly speed without responding to hall call	0							
	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								
Safety	Emergency operation indication at COP	In the event of an emergency, the emergency operation status will be displayed at COP	0							
Functions	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	0							
	Emergency call button	A button for passenger to make an emergency call when they are trapped inside the lift	0							
	Door open when lift car is overloaded	The doors will re-open when over load is detected, even during the closing of doors.	0							
	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	0							
	Home landing	To reduce passenger waiting time, the lift will return to the designated floor and stand by								
Service Functions	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 complection.								

Functions	Notes	Descriptions								
	Service floor cut-off selection [Manual]	linstalling 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	0							
	Door repeated opening	When an obstacle is detected, the door will repeatedly open and close until the obstacle is removed	0							
	Car indicator	Car indicator with the car operating panel	0							
	Adjustable door opening time	Adjusts the door opening time to reflect building usage	0							
	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								
Service Functions	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 auotmatically	\bigtriangleup							
	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	0							
	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	0							
	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	0							
	Nuisance call cancellation at reversal	Cancel intentionally registered nuisance calls automatically in the reversal travel direction	0							
	Multi-channel intercom	The intercom system can communicate with multi-stations simultaneously	0							
	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								
	Speech synthesizer	Announces car operations								
	Supervisory panel	Located in the building control room, etc. to monitor the status and control of each lift	\bigtriangleup							

Notes
1: Not applicable to lift car with through door.
2: Fire emergency operation and fireman service cannnot be applied simultaneously.
3: Standard function for 2-car operation or 3-car operation.
4: Over 5 stops and in-car weight less than 150 kg.

\bigcirc : STANDARD \triangle : OPTIONAL



Hoistway section





Typical floor hoistway plan (W, D)

Specifications

Туре		Nos.of Person	Capacity	Speed (m/s)	Cage s Internal			ntrance im)	C/W	Hoistway	size(m	m)	Motor Capacity	Max. Service	Max. Travel
		Feison	(kg)	(11/5)	AxB	Height	Width	Height		X×Y	OH	Р	(kW)	Stops(s)	
P8-CO60	w			1			800			2190 x 1670	3820	1350	3.6		80
F0-CO00	~~			'			900			2290 x 1670	3020	1550	5.0		00
P8-CO96	w			1.6			800			2190 x 1670	3970	1400	5.8		
							900			2290 x 1670					
P8-CO105	w	8	630	1.75	1400×1100	2300	800 900	2100	100 Side	2190 x 1670 2290 x 1670	4020	1450	6.3	40	100
							800			2290 x 1670 2190 x 1670					100
P8-CO120	w			2			900			2190 x 1070 2290 x 1670	4220	1650	7.2		
							800			2190 x 1670					
P8-CO150	w			2.5		ŀ	900			2290 x 1670	4270	2100	9.0		
							800			2200 x 1780		1050			
P11-CO60	w	11		1			900			2300 x 1780	3820	1350	4.7		80
P11-CO96	w			1.6			800			2200 x 1780	3970	1400	7.5		
P11-C090	vv			1.0			900			2300 x 1780	3310				
P11-CO105	w		825	1.75	1400×1350	2300	800	2100	Side	2200 x 1780	4020	1450	8.3	40	100
			020		-	2000	900	2100		2300 x 1780	.020		0.0		
P11-CO120	w			2			800			2200 x 1780	4220	1650	9.5		
					-		900 800			2300 x 1780 2200 x 1780	4270				
P11-CO150	w			2.5			900			2200 x 1780 2300 x 1780		2100	11.8		
							900			2400 x 1800					
P14-CO60	w			1			1000			2500 x 1800	3820	1350	6.0		80
							1100			2600 x 1800					00
							900			2400 x 1800					
P14-CO96	w			1.6			1000			2500 x 1800	3970	1400	9.7		
							1100]		2600 x 1800					
							900			2400 x 1800					
P14-CO105	w	14	1050	1.75	1600×1400	2300	1000	2100	Side	2500 x 1800	4020	1450	10.5	40	
							1100			2600 x 1800					100
							900			2400 x 1800		1055			
P14-CO120	w	-		2			1000			2500 x 1800	4220	1650	12.0		
							1100 900			2600 x 1800 2400 x 1800					
P14-CO150	w			2.5			1000			2400 x 1800 2500 x 1800	4270	2100	15.0		
F 14-00100	vv			2.5							4210	2100	15.0		
				2.0			1100			2600 x 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.

Specifications



Hoistway section

Car internal depth B stway depth Y + ê Door opening . width W Car internal width A Hoistway width X Typical floor hoistway plan (D2) Car internal depth B +depth

Typical floor hoistway plan (D)

Door opening width W

+

£

		Nos.of Person	Capacity (kg)	Speed (m/s)	Cage s Internal(ize mm)	(m	ntrance m)	C/W	Hoistway			Motor Capacity (kW)	Max. Service	Max. Travel				
		1 613011	(Ng)	(11//5)	AxB	Height	Width	Height		Χ×Υ	OH	Р	(kW)	Service Stops(s)	(m)				
P8-CO60	D			1			800			1990 x 1760	3820	1350	3.6		80				
							900			2140 x 1760									
P8-CO96	D			1.6			800 900			1990 x 1760 2140 x 1760	3970	1400	5.8						
							800			1990 x 1760				10					
P8-CO105	D	8	630	1.75	1100×1400	2300	900	2100	Side	2140 x 1760	4020	1450	6.3	40	100				
P8-CO120	D			2	1		800			1990 x 1760	4220	1650	7.2		100				
10-00120	0			2			900			2140 x 1760	4220	1050	1.2						
P8-CO150	D			2.5			800			1990 x 1760	4270	2100	9.0						
							900 800			2140 x 1760 2000 x 2060									
P11-CO60	D						900	-		2000 x 2000 2140 x 2060				40					
				1			800			2000 x 2170	3820	1350	4.7	~	80				
	D2						900			2140 x 2170				*					
	D						800			2000 x 2060				40					
P11-CO96				1.6			900			2140 x 2060	3970	1400	7.5						
	D2						800 900			2000 x 2170 2140 x 2170				*					
							800			2000 x 2060									
P11-CO105	D	11 825			4400	0000	900	2100	Cida	2140 x 2060	4020		8.3	40					
			825	1.75	1100×1700	2300	800	2100	Side	2000 x 2170		1450		*					
	D2						900			2140 x 2170				*	100				
P11-CO120 -	D						800			2000 x 2060	4220 1650			40	100				
	_			2			900 800			2140 x 2060		1650	9.5						
	D2						900			2000 x 2170 2140 x 2170				*					
							800			2000 x 2060) 11.8	40					
P11-CO150	D			2.5			900			2140 x 2060		70 2100		40					
P11-C0150	D2						800			2000 x 2170				*					
	02						900			2140 x 2170									
	D						900			2140 x 2460				40	- 80				
P14-CO60				1			1000 900			2340 x 2460 2140 x 2570	3820	1350	6.0						
	D2						1000			2140 x 2570 2340 x 2570				*					
	-						900			2140 x 2460				40					
P14-CO96	D			1.6			1000			2340 x 2460	3970	1400	9.7	40					
1 14 0000	D2			1.0			900			2140 x 2570	0070	1400	5.1	*					
							1000 900			2340 x 2570									
	D						1000			2140 x 2460 2340 x 2460				40					
P14-CO105		14	1050	1.75	1100×2100	2300	900	2100	Side	2140 x 2570	4020	1450	10.5						
	D2						1000			2340 x 2570				*					
	D						900			2140 x 2460				40	100				
P14-CO120	U			2			1000			2340 x 2460	4220	1650	12.0	40					
	D2			-			900			2140 x 2570				*					
							1000 900]		2340 x 2570 2140 x 2460									
	D						1000			2140 x 2460 2340 x 2460	0 4270			40					
P14-CO150				2.5			900			2340 x 2400 2140 x 2570		2100	15.0						
	D2										1000			2340 x 2570				*	

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.

Specifications



Hoistway section



Top floor hoistway plan





Typical floor hoistway plan

Туре		Nos.of	Capacity	Speed	Cage s Internal			ntrance nm)	C/W	Hoistway			Motor Capacity	Max. Service	Max. Travel
		Person	(kg)	(m/s)	A x B	Height	Width	Height	1	X×Υ	OH	Р	(kW)	Stops(s)	
P15-CO60	w			1			1000			2450 x 2170	4280	1380	7.0		80
1 13-0000				1			1100			2550 x 2170	4200	1000	1.0		00
P15-CO96	w			1.6			1000			2450 x 2170	4450	1450	12.0		
							1100	-		2550 x 2170					
P15-CO105	w	15	1150	1.75	1800×1500	2300	1000	2100	Rear	2450 x 2170	4510	1480	12.0	48	
	\square						1100			2550 x 2170				.	100
P15-CO120	w			2			1000			2450 x 2170	4600	1600	14.0		
					-		1100	-		2550 x 2170					
P15-CO150	w			2.5			1000	-		2450 x 2170 2550 x 2170	4900	2000	18.0		
P18-CO60	w			1			1100			2000 X 2170	4280	1380	8.0		80
P18-C080 P18-C096	w	-		1.6							4450	1450	14.0		00
		18	1350	1.75	2000×1500	2300	1100	2100	Rear	2650 x 2170	4450	1430	14.0	48	
P18-CO120	w	10	1550	2	2000~1300	2300		2100	Iteai	2030 X 2170	4600	1600	14.0		100
P18-CO150	w			2.5							4900	2000	20.0		
				-			1100			2700 x 2370					
P21-CO60	w			1			1200	1		2750 x 2370	4280	1380	10.0		80
D04 0000				4.0			1100	1		2700 x 2370	4450	4450	40.0		
P21-CO96	w			1.6			1200	1		2750 x 2370	4450	1450	16.0		
P21-CO105	\v/	21	1600	1.75	2000×1700	0000	1100	0400	D	2700 x 2370	4510	1480	18.0	48	
P21-C0105	vv	21	1600	1.75	2000×1700	2300	1200	2100 Re	Rear	2750 x 2370 4510	4510	1400	10.0	40	100
P21-CO120	w			2			1100]		2700 x 2370	4600	1600	20.0		100
121-00120	**			2			1200]		2750 x 2370	4000	1000	20.0		
P21-CO150	w			2.5			1100			2700 x 2370	4900	2000	24.0		
							1200			2750 x 2370					
P24-CO60	W			1							4280	1380	12.0		80
P24-CO96	W	24	1800	1.6	2100×1750	2300	1200	2100	Rear	2800 x 2420	4450	1450	18.0	48	
P24-CO105		24		1.75							4510	1480	20.0		100
P24-CO120				2							4600	1600	22.0		
P26-CO60	W			1							4280	1380	12.0		80
P26-CO96	W	26	2000	1.6	2100×1950	2300	1200	2100	Rear	2800 x 2620	4450	1450	20.0	48	
P26-CO105				1.75			.200				4510	1480	22.0		100
P26-CO120	W			2							4600	1600	24.0		

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.

Specifications





1

Door opening width W

Car internal width A

Hoistway width X

Typical floor hoistway plan (D2)

inter Car

Туре		Nos.of	Capacity	Speed	Cage s Internal(ntrance m)	C/W	Hoistway	size(m	m)	Motor Capacity	Max. Service	Max. Travel			
туре		Person	(kg)	(m/s)	AxB	Height	Width	Height	GIW	X×Y	OH	Р	(kW)	Stops(s)	(m)			
P15-CO60	w			1			1000			2750 x 1870	3910	1350	7.0		80			
1 10-0000	**						1100			2850 x 1870	3910	1550	7.0		00			
P15-CO96	w			1.6			1000			2750 x 1870	4060	1450	12.0					
							1100 1000			2850 x 1870 2750 x 1870								
P15-CO105	w	15	1150	1.75	1800×1500	2300	1100	2100	Side	2850 x 1870	4120	1500	12.0	48				
D15 CO120	14/			2			1000			2750 x 1870	4040	4050	44.0		100			
P15-CO120	W			2			1100			2850 x 1870	4210	1650	14.0					
P15-CO150	w			2.5			1000 1100			2750 x 1870 2850 x 1870	4460	2050	18.0					
P17-CO60	w			1			1100			2000 x 10/0	3910	1350	8.0		80			
P17-C096	W			1.6							4060	1450	12.0					
P17-CO105	W	17	1275	1.75	2000×1400	2300	1100	2100	Side	2950 x 1830	4120	1500	14.0	48	100			
P17-CO120	W			2							4210	1650	16.0		100			
P17-CO150	W			2.5							4460	2050	20.0					
P18-CO60	W			1							3910	1350	8.0		80			
P18-CO96	W			1.6							4060	1450	14.0	40				
P18-CO105	W	18	18	18	18	1350	1.75 2	2000×1500	2300	1100	2100	Side	2950 x 1870	4120 4210	1500 1650	14.0 16.0	48	100
P18-CO120 P18-CO150	W					2.5	-						4210	2050	20.0			
1 10-00130	~~						1100			2980 x 2110	4400	2000	20.0					
P21-CO60	W			1			1200			3080 x 2110	3910	1400	10.0		80			
				1.6		2300	1100	2100		2980 x 2110	4000	4500	10.0	48				
P21-CO96	W			1.6			1200			3080 x 2110	4060	1500	16.0					
P21-CO105	w	21	1600	1.75	2000×1700		1100		Side	2980 x 2110	4120	1550	18.0					
121-00103	**		1000		200000	2000	1200		Ciuc	3080 x 2110	4120	1550	10.0		100			
P21-CO120	w			2			1100			2980 x 2110	4210	1700	20.0		100			
							1200			3080 x 2110								
P21-CO150	w			2.5			1100			2980 x 2110	4460	2100	24.0					
P24-CO60	14/			1			1200			3080 x 2110	3910	1400	12.0		80			
P24-C000 P24-C096	W			1.6	2100×1750	2300					4060	1400	12.0 18.0	- 48				
P24-CO105	W	24	1800	1.75			1200	2100	Side	3030 x 2130	4120	1550	20.0		100			
P24-C0120	w			2							4210	1700	22.0					
P26-CO60	W			1							3910	1400	12.0		80			
P26-CO96	W		2000	1.6	2100-1050	2200	1200	2100	0:4-	3030 x 2310	4060	1500	20.0	40				
P26-CO105	W	26	2000	1.75	2100×1950	2300	1200	2100	Side	3030 X 23 10	4120	1550	22.0	48	100			
P26-CO120	W			2							4210	1700	24.0					
P17-2S60	D			1							3910	1350	8.0		80			
P17-2S96	D			1.6							4060	1450	12.0					
P17-2S105	D	17	1275	1.75	1200×2300	2300	1100	2100	Side	2180 x 2760	4120	1500	14.0	48	100			
P17-2S120 P17-2S150	D			2 2.5							4210 4460	1650 2050	16.0					
P17-23150	D D2			2.5							3910	1350	20.0 8.0		80			
P17-2S96	D2			1.6							4060	1450	12.0		00			
P17-2S105	D2	17	1275	1.75	1200×2200	2300	1100	2100	Side	2180 x 2870	4120	1500	14.0	*	100			
P17-2S120	D2			2	1200-2200	2000	1100	2100	Ciuc		4210	1650	16.0		100			
P17-2S150	D2			2.5							4460	2050	20.0					
P21-2S60	D			1							3910	1400	10.0		80			
P21-2S96	D]		1.6							4060	1500	16.0					
P21-2S105	D	21	1600	1.75	1400×2400	2300	1200	2100	Side	2380 x 2860	4120	1550	18.0	48	100			
P21-2S120	D			2							4210	1700	20.0		100			
P21-2S150	D			2.5							4460	2100	24.0					
P21-2S60	D2			1							3910	1400	10.0		80			
P21-2S96	D2	24		1.6		2200	1200	2100	Side	2200 - 2070	4060	1500	16.0					
P21-2S105 P21-2S120	D2)2	21	1600	1.75 2	1400×2300	2300	1200	2100	Side	ide 2380 x 2970	4120 4210	1550 1700	18.0	*	100		
P21-25120 P21-2S150	D2 D2			2.5							4210	2100	20.0 24.0		100			
W: Wide ca		D				daan X	0		-11 - 4 - 11 - 1	l		2100	2-1.0					

W: Wide car D: Deep car D2: Front and rear opening door %Consult our local distributor 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.

Works by Others

Works below are not included in elevator installation works:

Memo

► 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 prevert 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.



Global Network

A TOSHIBA ELEVATOR AND BUILDING SYSTEMS CORPORATION Head Office: 72-34, Horikawa-cho, Saiwai-ku, Kawasaki 212-8585, Japan Factory: 1 Toshiba-cho, Fuchu City, Tokyo 183-8511

TOSHIBA ELEVATOR PRODUCTS CORPORATION Head Office: 1000, Hamada, Amiboshi Ward, Himeji City, Hyogo Prefecture



C TOSHIBA ELEVATOR (CHINA) CO., LTD. Head Office: No. 685 Wen Chuan Road, Baoshan District, Shanghai 201901, The People's Republic of China.

D CHEVALIER (HK) LIMITED Head Office: 22nd Floor, Chevalier Commercial Centre, 8 Wang Hoi Road, Kowloon Bay, Hong Kong

10

1 8

CHEVALIER SINGAPORE HOLDINGS PTE. LTD. Head Office: 23 Genting Road #07-01/02 Chevalier House, Singapore 349481

3

4

2

Head office / Manufacturing base Head office



Head Office: 8th Floor, Wisma Penang Garden, 42 Jalan Sultan Ahmad Shah, 10050 Penang, Malaysia. Factory: 2530, Lorong Perusahaan 10, Prai Industrial Estate, 13600 Prai, Province, Wellesley, Malaysia.

M S ELEVATORS ENGINEERING Sdn. Bhd. Head Office: 8th Floor, Wisma Penang Garden, 42 Jalan Sultan Ahmad Shah, 10050 Penang, Malaysia. KL Office: Wisma MS, No.15, Jalan 2/116 D, Kuchai Entrepreneurs' Park, Off Jalan Kuchai Lama, 58200 Kuala Lumpur, Malaysia.

G TOSHIBA JOHNSON ELEVATORS (INDIA) PVT. LTD. Head Office: 602, 6th Floor, C&B Square, Sangan Complex 127, Andheri Kurla Road. Andheri (East), Mumbai, 400059 India

Head Officer D. D. Head Officer D. He Head Office: P. O. Box 16733, Dubai, UAE

Toshiba Elevator (Vietnam) Limited Liability Company Head Office: No. 36, Street 96, Quarter 2, Thanh My Loi Ward, Thu Duc City, Ho Chi Minh City, Vietnam

Together with our global partners, we connect with Asia and then the world, through our technology and our spirit.

This planet is our shared heritage. We must live together, grow together and delight in one another.

[For more information]

E

Ø

Toshiba Elevator and Building Systems Corporation Head office: 72-34, Horikawa-cho, Saiwai-ku, Kawasaki 212-8585, Japan

https://www.toshiba-elevator.co.jp/elv/infoeng/

