

Contact Address:

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If you need detailed information, please contact us.



Hitachi
Machine Room-less Elevator
Model LGE

Car Design

Standard



Ceiling Height	2300mm
Car Ceiling	RF-081 Painted Steel (HP57) LED Downlight
Front Wall	Painted Steel (HP57)
Side Wall	Painted Steel (HP57)
Rear Wall	Painted Steel (HP57)
Transom	Painted Steel (HP57)
Car Door	Painted Steel (HP57)
Floor	Vinyl Tile (S-033)

HP57: Matte Light Brown

Car Design

Option



Ceiling Height	2300mm
Car Ceiling	RF-081 Stainless Steel Hairline LED Downlight
Front Wall	Stainless Steel Hairline
Side Wall	Stainless Steel Hairline
Rear Wall	Stainless Steel Hairline
Transom	Stainless Steel Hairline
Car Door	Stainless Steel Hairline
Floor	Vinyl Tile (A-26)

Option



Ceiling Height	2300mm
Car Ceiling	RF-082 Stainless Steel Hairline LED Straight Tube Light
Front Wall	Stainless Steel Hairline
Side Wall	Stainless Steel Hairline
Rear Wall	Stainless Steel Hairline
Transom	Stainless Steel Hairline
Car Door	Stainless Steel Hairline
Floor	Vinyl Tile (A-26)

Standard **Standard** Deeper Cabin

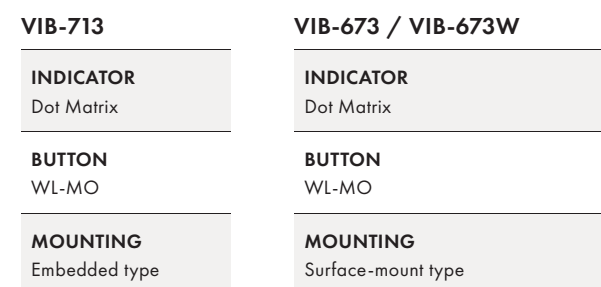


Standard

DIMENSION	ø36mm
MATERIAL	Rim: Stainless Steel Brushed Faceplate: Stainless Steel Brushed
ILLUMINATION	Symbol and periphery lighted up in orange



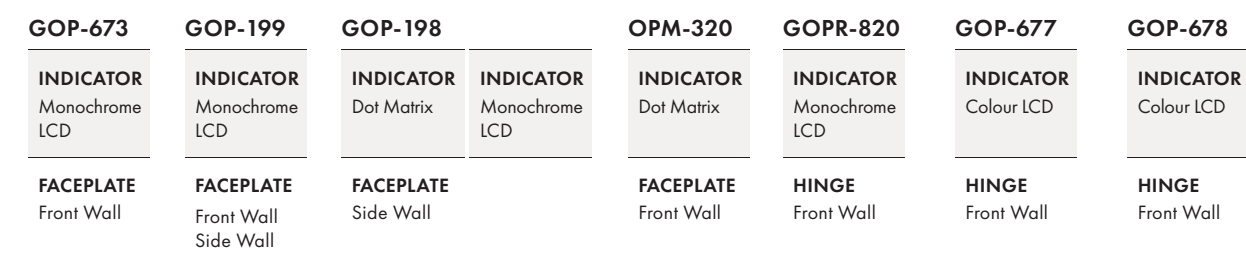
Standard



Car Operating Panel (With Faceplate: Stainless Steel Hairline)

Option

Option



Option



Button

Option

WL-MW

DIMENSION	ø36mm
MATERIAL	Rim: Stainless Steel Brushed Faceplate: Stainless Steel Hairline
Braille option available*	

GL-MB

DIMENSION	42×37mm
MATERIAL	Rim: Stainless Steel Mirror Faceplate: Stainless Steel Hairline
Braille option available*	

FL-PW

DIMENSION	ø40mm
MATERIAL	Rim: Stainless Steel Mirror Faceplate: Plastic
Braille option available*	

WL-MWB

DIMENSION	ø36mm
MATERIAL	Rim: Stainless Steel Brushed Faceplate: Stainless Steel Hairline
Braille option available*	

XL-MO

DIMENSION	ø34.4mm
MATERIAL	Rim: Zinc Alloy Faceplate: Stainless Steel Mirror
Braille option available*	

XL-MBA

DIMENSION	34.4x34.4mm
MATERIAL	Rim: Zinc Alloy Faceplate: Stainless Steel Mirror
Braille option available*	

HL-PWA (Antibacterial Button)

DIMENSION	ø40mm
MATERIAL	Rim: Stainless Steel Mirror Faceplate: Plastic
Braille option available*	

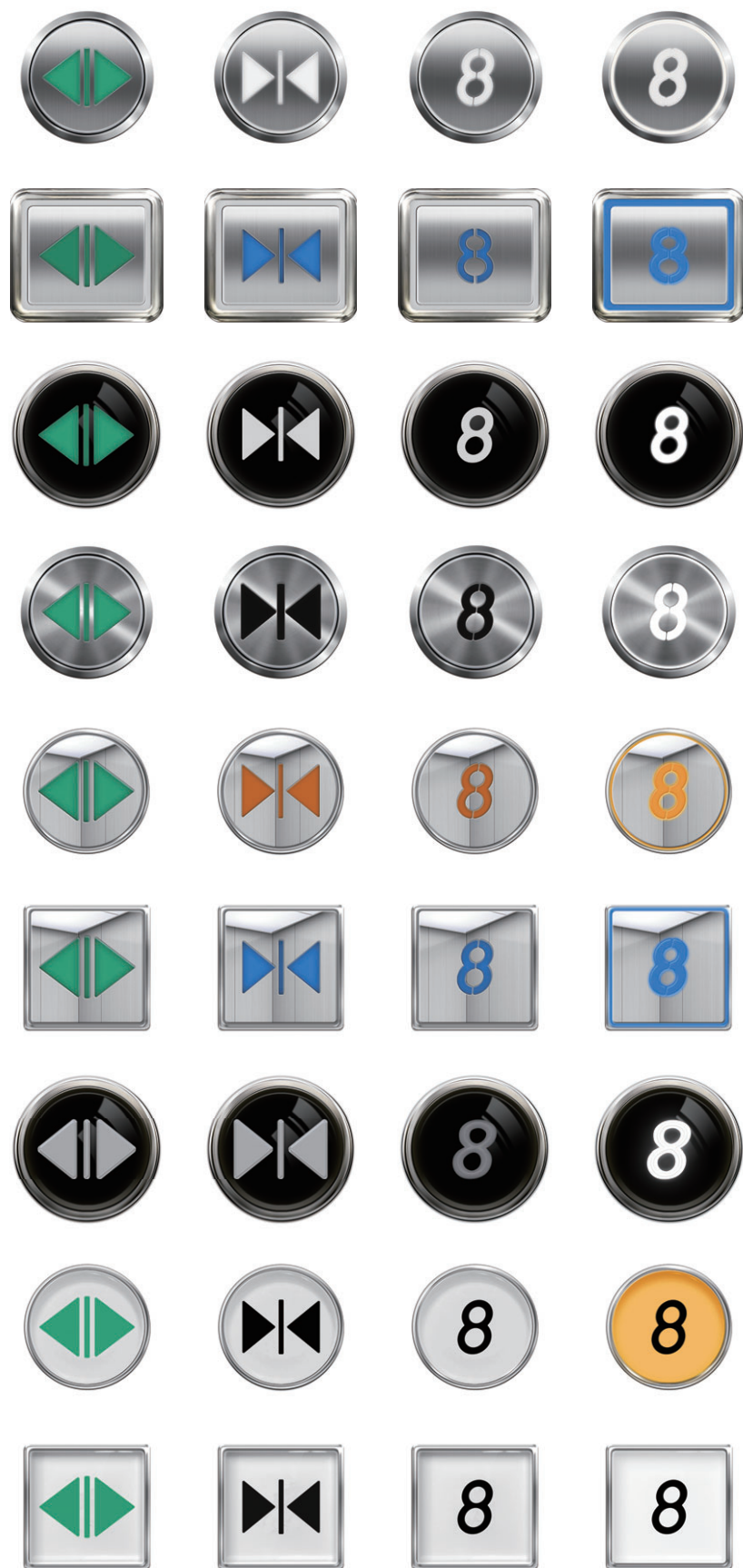
XL-PO

DIMENSION	ø34.4mm
MATERIAL	Rim: Zinc Alloy Faceplate: Acrylic
Braille option NOT available	

XL-PWA

DIMENSION	34.4x34.4mm
MATERIAL	Rim: Zinc Alloy Faceplate: Acrylic
Braille option NOT available	

* Braille option available with maximum 2 digits.



Hall Operating Panel (With Faceplate: Stainless Steel Hairline)

Option

VIB-820	VIB-820	VIB-673	HB-181A	HB-673	HB-673-01	HBC-820	HBC-20A
MOUNTING	MOUNTING	MOUNTING	MOUNTING	MOUNTING	MOUNTING	MOUNTING	MOUNTING
Surface-mount	Surface-mount	Surface-mount	Embedded	Surface-mount	Surface-mount	Surface-mount	Embedded
INDICATOR	INDICATOR	INDICATOR					
Colour LCD	Monochrome LCD	Monochrome LCD					

Hall Lantern / Hall Indicator

Option

GHL-820	GHL-673	GHL-668	GHI-675
MOUNTING	MOUNTING	MOUNTING	MOUNTING
Surface-mount	Surface-mount	Surface-mount	Embedded type
FACEPLATE	FACEPLATE	FACEPLATE	FACEPLATE
Stainless Steel Hairline	Stainless Steel Hairline	Aluminum alloy	Stainless Steel Hairline
With Chime	With Chime	Without Chime	

Ceiling

(With LED Light)

Option



RF-018

LIGHTING

LED Panel Light + Spotlight

MATERIAL

Stainless Steel +
Painted Steel_HP65(Matt Black)



RF-080

LIGHTING

LED Ceiling Light

MATERIAL

Painted Steel_HP57(Matt Light Brown)



CE-011

LIGHTING

LED Downlight + Straight Tube Light

MATERIAL

Painted Steel_YM47(Champagne)



DP-047

LIGHTING

LED Downlight + Troffer Light

MATERIAL

Stainless Steel +
Painted Steel_HP57(Matt Light Brown)



RF-013

LIGHTING

LED Downlight + Straight Tube Light

MATERIAL

Painted Steel_BN18(Gray)



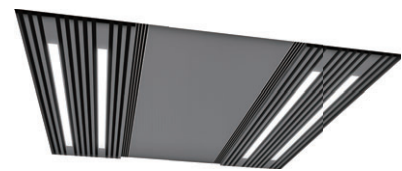
RF-082

LIGHTING

LED Straight Tube Light

MATERIAL

Painted Steel_WN01(Ivory White)



CE-015

LIGHTING

LED Straight Tube Light

MATERIAL

Painted Steel_HM03(Matt Silver)



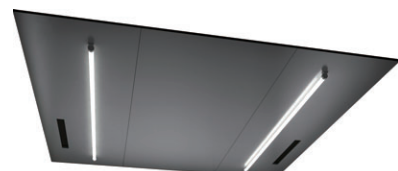
DP-016

LIGHTING

LED Panel Light + Spotlight

MATERIAL

Painted Steel_YM47(Champagne)



RF-056 (False ceiling by customer)

LIGHTING

LED Straight Tube Light

MATERIAL

Painted Steel_BN18(Gray)



RF-013A

LIGHTING

LED Downlight + Straight Tube Light

MATERIAL

Painted Steel_YM47(Champagne)

With Car Top Emergency Exit



RF-082A

LIGHTING

LED Straight Tube Light

MATERIAL

Painted Steel_WN01(Ivory White)

With Car Top Emergency Exit

NOTES

- The ceilings illustrated here are based on 1600x1500mm car size.
- The ceiling profile may vary with different car size.
- Details, please contact us.

Handrail

(With Stainless Steel Hairline / Mirror)

Option



AA-Y138



AA-BS



HR-M037



MR-M050

Car Floor

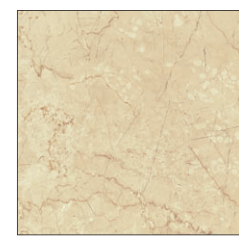
(With Vinyl Tile)

Standard

Option



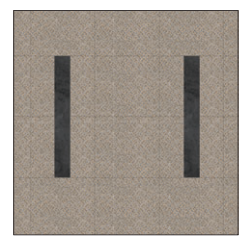
S-033



S-048

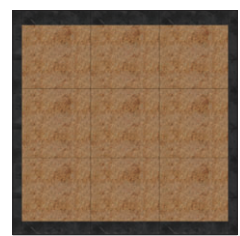


S-693



FL-P008

The image above represents the whole floor area in the elevator car.



FL-P009

The image above represents the whole floor area in the elevator car.



A-26

Painted Steel

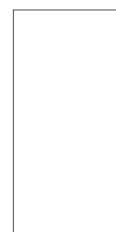
Standard

Option



HP57

(Matt Light Brown)



WP71

(White)



WN01

(Ivory White)



HN17

(Light Brown)



YM47

(Champagne)



HM03

(Matt Silver)



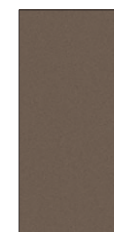
HP72

(Light Gray)



BN18

(Gray)



YM62

(Mocha Brown)



YM24

(Champagne Gold)

Stainless Steel

Option



Hairline



Mirror



Non
Direction
Hairline

Plating Colour

(For Stainless Steel)

Option



Rose



Champagne



Titanium
Gold

Decorated steel

(For Car Panel Only)

Option



GSD92508



GSDV5



GSDV7

Car Design Variations

Items	Finishes / Types	Standard	Option
Ceiling	RF-081	●	
	Without car top emergency exit: RF-082, RF-080, RF-013, RF-018, CE-011, CE-015, RF-056, DP-016, DP-047, With car top emergency exit: RF-082A, RF-081A, RF-013A, CE-011A, CE-015A, RF-056A		○
Car wall	Painted steel (HP57 (Matt Light Brown))	●	
	Painted steel (Other colours) Stainless steel hairline Stainless steel hairline (Rose / Champagne / Titanium Gold) Stainless steel mirror Stainless steel mirror (Rose / Champagne / Titanium Gold) Stainless steel non direction hairline Stainless steel non direction hairline (Rose / Champagne / Titanium Gold) Decorated steel (GSD92058 / GSDV5 / GSDV7)		○
Car door	Painted steel (HP57 (Matt Light Brown))	●	
	Painted steel (Other colours) Stainless steel hairline Stainless steel hairline (Rose / Champagne / Titanium Gold) Stainless steel mirror Stainless steel mirror (Rose / Champagne / Titanium Gold) Stainless steel non direction hairline Stainless steel non direction hairline (Rose / Champagne / Titanium Gold)		○
Handrail	AA-Y138, AA-Y150, HR-M050, AA-BS, HR-M037		○
Floor	S-033	●	
	S-043, S-048, S-693, A-26, FL-P008, FL-P009		○
Car sill	Aluminum	●	
Car operating panel	GOP-673 (Dot Matrix) / GOP-199 (Dot Matrix) for deeper cabin	●	
	GOP-673 (Monochrome LCD), OPM-320, GOP-198, GOP-199, GOPR-820, GOP-677, GOP-678		○
Horizontal car operating panel	GOP-610, GOPC-520		○
Button	WL-MO	●	
	WL-MW, WL-MB, GL-MOA, GL-MW, GL-MB, FL-PW, WL-MWB, XL-MO, XL-MW, XL-MB, XL-MOA, XL-MWA, XL-MBA, HL-PWA, XL-PO, XL-PW, XL-PB, XL-POA, XL-PWA, XL-PBA, KL-MOD, KL-MW, UL-MWA		○

Hall Design Variations

Items	Finishes / Types	Standard	Option
Jamb type	AS-1X	●	
Jamb finishes	Painted steel (WN01(Ivory White))	●	
	Painted steel (Other colours) Stainless steel hairline Stainless steel hairline (Rose / Champagne / Titanium Gold) Stainless steel mirror Stainless steel mirror (Rose / Champagne / Titanium Gold) Stainless steel non direction hairline Stainless steel non direction hairline (Rose / Champagne / Titanium Gold)		○
Landing door	Painted steel (WN01(Ivory White))	●	
	Painted steel (Other colours) Stainless steel hairline Stainless steel hairline (Rose / Champagne / Titanium Gold) Stainless steel mirror Stainless steel mirror (Rose / Champagne / Titanium Gold) Stainless steel non direction hairline Stainless steel non direction hairline (Rose / Champagne / Titanium Gold)		○
Landing sill	Aluminum	●	
Hall operating panel	VIB-673/673W (Dot Matrix) VIB-713 (for top floor)	●	
	VIB-673/673W (Monochrome LCD), VIB-820/820W, HB-181A, HB-673, HB-673-01, HBC-820, HBC-20A		○
Button	WL-MO	●	
	WL-MW, WL-MB, GL-MOA, GL-MW, GL-MB, FL-PW, WL-MWB, XL-MO, XL-MW, XL-MB, XL-MOA, XL-MWA, XL-MBA, HL-PWA, XL-PO, XL-PW, XL-PB, XL-POA, XL-PWA, XL-PBA, KL-MOD, KL-MW, UL-MWA		○
Hall lantern	GHL-673, GHL-820, GHL-668		○
Hall indicator (horizontal)	GHI-675		○



PLANNING GUIDE

ELEVATOR FUNCTIONS

Standard Function

Control Mode			
SA1	Simplex Full Collective Control	SA2	Floor Height Self Measurement
SA3	On-Cage (Car Top) Maintenance Operation	SA4	In-Cage Maintenance Operation
System Protection			
SB1	Over-Speed Electrical Protection	SB2	Over-Seed Mechanical Protection
SB3	Rope Slipping Running Protection	SB4	Motor Overload (Thermal) Protection
SB5	Automatic Fault Detection	SB6	Automatic Fault Recording
SB7	Standby Regular Auto-Check	SB8	Double Brake-Safety Detection
SB9	Synchronous Motor Magnetic Pole Code Self-learning	SB10	Lift-Position Abnormity Auto-Correction Function
SB11	Nearest Landing Operation	SB12	Anti-Electromagnetic Interference
Safe Communication			
SC1	Interphone System	SC2	Pit Interphone
Safe Riding			
SD1	Out of Door-Open Zone Alarm	SD2	Alarm System
SD3	Door Safety Return System	SD4	Full Load Bypass Operation
SD5	Overload Detection System	SD6	Overload Alarm
SD7	Next Drive (Door Open Abnormity)	SD8	Door Opening/Closing Time Abnormity Protection
SD9	Automatic Door Open Time Control	SD10	Automatic Door Open Time Adjustment
SD11	Number of Runs Indicator	SD12	Intelligent Multi-Beam Protection
SD13	Inspection Indication in Hall Indicator	SD14	Overload Indicator (In Car)
SD15	UCMP Car Accidental Movement Protection Function	SD16	Intelligent Auxiliary Braking Operation
Emergency Solution			
SE1	Car Emergency Lighting	SE2	Fire Emergency Operation (Automatic)
SE3	Hall Emergency Electric Operation Function	SE4	Automatic Rescue Device (ARD)
Design for Comfort			
SF1	Parking Operation	SF2	Automatic Return Function
SF3	Start Torque Auto-Adjustment	SF4	Door-Stop Function (Maintenance)
SF5	Micro Levelling (Travel≥30m)	SF6	Step-Less Speed Control
SF7	Mischievous Call Cancellation	SF8	Opposite Direction Car Call Cancellation
SF9	Car Light Auto Turn-Off	SF10	Car Fan Auto Turn-Off
SF11	Abnormal Duration Hall Call Detection	SF12	Landing and Car Door Switch Bypass Detection
SF13	Voice Synthesizer		

Optional Function

Control Mode			
OA1	Simplex Down Collective Control	OA2	Duplex Full Collective Control
OA3	Duplex Down Collective Control	OA4	FI-10 Group Control ❶
OA5	Independent Automatic Operation ❶		
Safe Communication			
OB1	Interphone System (5-way) ❶	OB2	Contact at Control Panel (RS485)
OB3	Supervisory Panel (Dry Contact Type)	OB4	Twisted Pair Cable (1 Pair) for CCTV
OB5	BGM Interface in Cage	OB6	Contact at Control Panel (Dry Contacts)
OB7	Camera Device in Cage		
Safe Riding			
OC1	Safety Edge Protection	OC2	Multi-Beam + Safety Edge Protection
OC3	Card Reader Interface (In Car) (Serial Communication) ❷	OC4	Card Reader Interface (In Car) (Dry Contact) ❷
Emergency Solution			
OD1	Fireman Operation	OD2	Emergency Operation for Power Failure (Manual)
OD3	Emergency Operation for Power Failure (Auto)	OD4	Earthquake Emergency Operation
Design for Comfort			
OE1	Attendant Operation	OE2	Independent Operation
OE3	Arrival Chime (Car Top & Bottom)	OE4	Door Opening Prolong Button
OE5	Sub Car Operating Panel	OE6	Advance Door Opening
OE7	Rush Hour Schedule Operation	OE8	Horizontal Car Operating Panel
OE9	Braille Button	OE10	Car Call Deselect Function
OE11	Hall Call Registration in OPB ❶	OE12	Car Floor Button Flashing
OE13	Micro Levelling (Travel < 30m)	OE14	Hall Indicator Signal Lamp ❶
OE15	Hall Lantern with Arrival Chime ❶	OE16	Hall Call Deselect Function ❶
OE17	Overload Hall Call Restore	OE18	Door Nudging Operation ❶
OE19	Door Opening by Current Floor Button	OE20	Door Quick Closing After New Car Call

NOTES

❶ Details, please contact us.

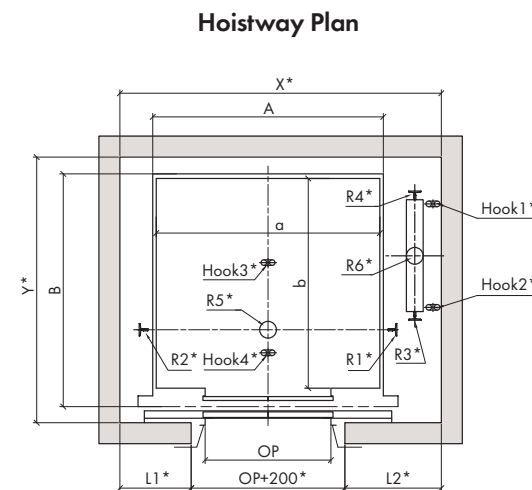
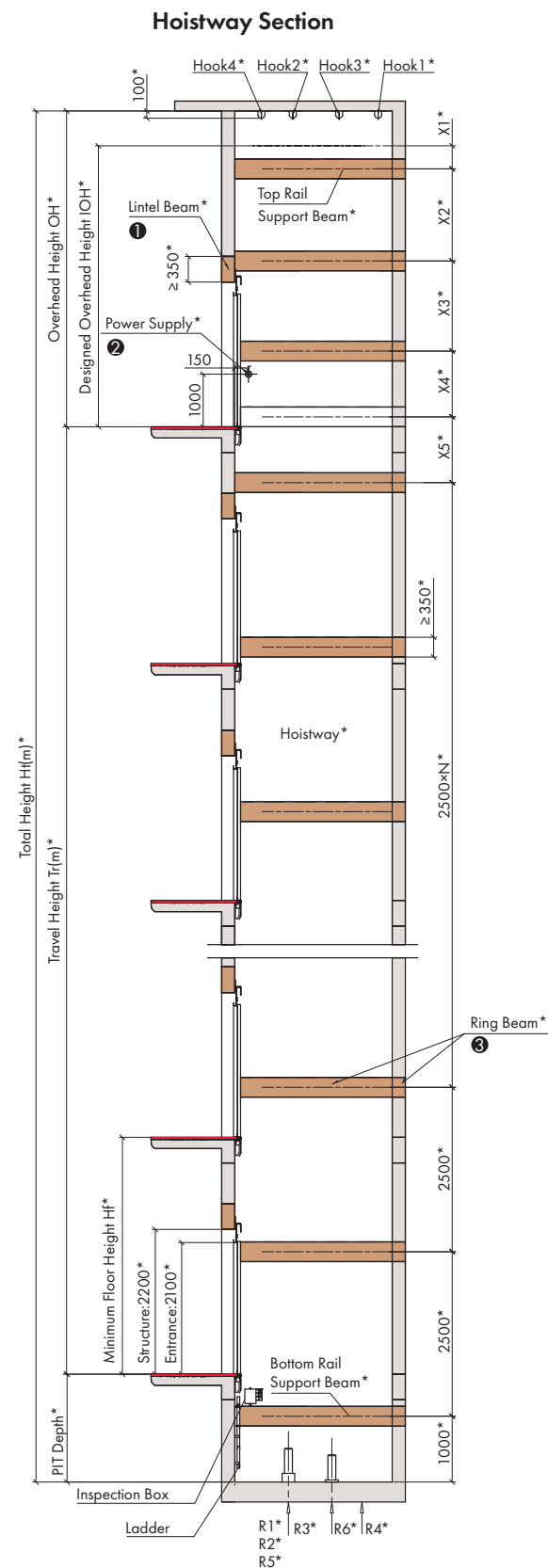
❷ OC3 [Card Reader Interface (In Car) (Serial Communication)] and OC4 [Card Reader Interface (In Car) (Dry Contact)] cannot be selected together.

PLANNING GUIDE

HOISTWAY PLANNING

The following building components are supplied by the builder.

- Building structure
- Flooring and wall finishes
- Intermediate beam (3 sides)



NOTES

- When the front wall of the hoistway is a brick wall structure, a reinforced concrete beam with a height of not less than 350mm and a strength of not less than C25 should be set above the landing door.
- The opening shown in the figure is the power outlet position.
 - Lighting Power supply : Single-phase AC 230V 50Hz
 - Main Power supply : Three-phase AC 415V 50Hz
 - Electrical conduit length from hoistway wall : 50mm
 - Electrical wiring length from hoistway wall : 7500mm
- The hoistway construction shall be reinforced concrete ring beam with strength C25 or whole hoistway of reinforced concrete wall. If you have other situations, please contact us.

REMARKS

- The items with "*" in the figure shall be furnished by building contractors. For hoistway details, please refer to the drawings provided by us.
- Unit of dimensions shall be in mm unless otherwise stated.
- The suspension hooks capacity shall be as follows:

Hook1 (Ton)	Hook2 (Ton)	Hook3 (Ton)	Hook4 (Ton)
2	2	3	3

Elevator Specification

Load (kg)	No. of Passengers	Speed (m/s)	Maximum Number of Stops	Maximum Travel (m)	Maximum Travel with Fireman Operation (m)	Minimum Floor Height (mm)
476	7	1.0	12	30	—	2600
544	8	1.0/1.5/1.75	1.0 m/s: 22 1.5 m/s: 36 1.75 m/s: 36	1.0 m/s: 60 1.5 m/s: 90 1.75 m/s: 90	1.0 m/s: 58 1.5 m/s: 86 1.75 m/s: 90	
680	10					
748	11					
884	13					
952	14					
1020	15					

NOTES

- The minimum floor height is based on non-fire rated door.

Hoistway Planning

Load (kg)	Speed (m/s)	Car Size (mm)		Door Size (mm)		Front Wall (mm)		Hoistway Size (mm)	Pit Reaction Load (kN)					
		Internal a×b	External A×B	Type	Width OP	L1	L2		R1	R2	R3	R4	R5	R6
476	1.0	1000×1200	1050×1360	CO	700	385	415	1700×1620	40	30	30	25	100	90
544	1.0	1100×1300	1150×1460	CO	800	385	415	1800×1700	65	50	50	45	110	100
544	1.5/1.75	1100×1300	1150×1460	CO	800	395	405	1800×1750	65	50	50	45	110	100
544	1.0	1300×1100	1350×1260	CO	800	435	515	1950×1620	65	50	50	45	110	100
544	1.5/1.75	1300×1100	1350×1260	CO	800	445	505	1950×1750	65	50	50	45	110	100
680	1.0/1.5/1.75	1350×1300	1400×1460	CO	800	420	580	2000×1750	70	55	55	45	120	105
748	1.0/1.5/1.75	1250×1500	1300×1660	CO	800	420	530	1950×1900	70	55	55	45	120	105
884	1.0/1.5/1.75	1100×2000	1150×2160	CO	800	460	460	1920×2400	80	65	60	50	135	115
884	1.0/1.5/1.75	1100×2000	1150×2160	CO	900	410	410	1920×2400	80	65	60	50	135	115
884	1.0/1.5/1.75	1100×2000	1150×2198	2S	800	145	605	1750×2450	80	65	60	50	135	115
884	1.0/1.5/1.75	1100×2000	1150×2198	2S	900	145	505	1750×2450	80	65	60	50	135	115
952	1.0/1.5/1.75	1100×2100	1150×2260	CO	900	410	410	1920×2500	80	65	60	50	135	115
952	1.0/1.5/1.75	1100×2100	1150×2298	2S	900	145	505	1750×2550	80	65	60	50	135	115
952	1.0/1.5/1.75	1100×2100	1150×2298	2S	1000	145	505	1850×2550	80	65	60	50	135	115
952	1.0/1.5/1.75	1500×1500	1550×1660	CO	900	445	605	2150×1900	80	65	60	50	135	115
952	1.0/1.5/1.75	1500×1500	1550×1660	CO	1000	495	555	2250×1900	80	65	60	50	135	115
952	1.0/1.5/1.75	1600×1400	1650×1560	CO	900	495	655	2250×1800	80	65	60	50	135	115
952	1.0/1.5/1.75	1600×1400	1650×1560	CO	1000	495	605	2300×1800	80	65	60	50	135	115
1020	1.0/1.5/1.75	1600×1500	1650×2060	CO	900	495	655	2250×1900	80	65	60	50	135	115
1020	1.0/1.5/1.75	1600×1500	1650×1660	CO	1000	495	605	2300×1900	80	65	60	50	135	115
1020	1.0/1.5/1.75	1500×1600	1550×1760	CO	900	445	605	2150×2000	80	65	60	50	135	115
1020	1.0/1.5/1.75	1300×1900	1350×2060	CO	900	440	510	2050×2300	80	65	60	50	135	115

NOTES

- The above information and dimensions are based on right side counterweight.
- The above information and dimensions are based on non fire rated door.

Overhead Height and Pit Depth

Load (kg)	Speed (m/s)	Overhead Height: OH (mm)	Pit Depth: PIT (mm)
476	1.0	3750	1350
544	1.0	3750	1350
	1.5	3900	1400
	1.75	3950	1450
680	1.0	3750	1350
	1.5	3900	1400
	1.75	3950	1450
748	1.0	3750	1350
	1.5	3900	1400
	1.75	3950	1450
884	1.0	3750	1600
	1.5	3900	1650
	1.75	3950	1650
952	1.0	3750	1600
	1.5	3900	1650
	1.75	3950	1650
1020	1.0	3750	1600
	1.5	3900	1650
	1.75	3950	1650

- NOTES
- The pit depth, PIT is based on standard vinyl tile finish without floor recess.
 - The overhead height, OH is based on bare ceiling height of 2300mm.

Electrical

No.	Load (kg)	Speed (m/s)	Supply Voltage (Lighting)	Transformer Capacity (kVA)		Circuit Breaker Capacity (A)		Main Power Wire Size (mm²)		Earth Wire Size (mm²)	
				1 unit	2 units	1 unit	2 units	1 unit	2 units	1 unit	2 units
1	476	1.0	3ø415V (1ø230V) 50Hz	6	11	40	40	6	8	6	8
2	544	1.0		7	12	40	40	6	8	6	8
		1.5		9	15	40	50	6	10	6	10
		1.75		10	16	40	50	6	10	6	10
3	680	1.0		8	14	40	40	6	8	6	8
		1.5		11	18	40	50	8	10	8	10
		1.75		12	20	40	63	8	16	8	16
4	748	1.0		8	14	40	40	6	8	6	8
		1.5		11	18	40	50	8	10	8	10
		1.75		12	20	40	63	8	16	8	16
5	884	1.0		10	16	40	50	6	10	6	10
		1.5		12	21	40	63	8	16	8	16
		1.75		14	23	40	80	8	16	8	16
6	952	1.0		10	16	40	50	6	10	6	10
		1.5		12	21	40	63	8	16	8	16
		1.75		14	23	40	80	8	16	8	16
7	1020	1.0		10	16	40	50	6	10	6	10
		1.5		12	21	40	63	8	16	8	16
		1.75		14	23	40	80	8	16	8	16

- NOTES
- The transformer capacity and circuit breaker capacity in the above table are the requirements at building side.
 - The main power wire size specified above is applicable for wire length less than 150m. For main power wire length more than 150m, please contact us.
 - Main power supply shall be in three-phase, five wires system with independent ground wire.

Recommendations for Layout

Service Floors

We do not recommend that only specific elevators are assigned to service specific floors due to the followings:

- A) Passengers in other elevators will need to transfer to these specific elevators in order access these specific floors.
- B) Not only that the efficiency of these specific floors decline, the efficiency of the overall traffic also gets impacted.

Unification of Base Floor for Elevators in a Group

When the entrances of a building are set on different floors such as ground floor and B1, please do not set both the ground and B1 as the base floors for elevators in a group.

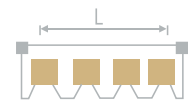
Arrangement of Elevators

In order to realize a good service in a group of elevators, the following points shall be considered.

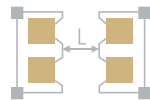
- A) Maximum number of inline arrangement is four.
- B) If there are four elevators, please adopt the face-to-face setting and keep the distance of 3.5m to 4.5m in between.
- C) For the convenience of elevators being visible from all positions, please avoid placing elevator entrance near pillars.

Multiple Elevators In One Group

Desirable Examples



In-line arrangement,
Distance, $L \leq 8\text{m}$

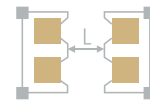


Face-to-face arrangement,
Distance, $L=3.5 - 4.5\text{m}$

Undesirable Examples



Pillar at lift lobby
or entrance



Distance, $L > 5\text{m}$

Civil Works Matters

Working environment of the elevator shall be as follows

1. Ambient temperature shall be between 5°C to 40°C .
2. Maximum relative humidity is 90%, and the monthly mean minimum temperature should be below 25°C .
3. Supply voltage fluctuation shall be within $\pm 7\%$.
4. Surrounding environment shall be free from explosive & corrosive hazard, anti-insulation and conductive particles atmosphere.

About Hoistway

1. Hoistway walls (including reinforced concrete ring beams) should be vertical, and the allowable deviation for the hoistway verticality is:
Total Height $\leq 30\text{m}$: $0 \sim +25\text{mm}$.
 $30\text{m} < \text{Total Height} \leq 60\text{m}$: $0 \sim +35\text{mm}$.
Total Height $> 60\text{m}$: $0 \sim +50\text{mm}$.
2. Hoistway walls shall be 200mm concrete walls.
3. Elevator hoistway is preferably not located in the space above accessible area. If the actual situation cannot meet the regulations, please contact us.
4. If elevator hoistway is of steel structure construction, please contact us.
5. Hoistway walls, floors and roofs should be able to absorb a large number of elevator operation noise.
6. Hoistway should not be located directly adjacent to bedrooms, classrooms, wards, library or any other places where low noise is required. Where such arrangements need to be imposed, the building contractors must be responsible for taking measures of sound insulation and cushioning.

Work to Be Done by Building Contractors

1. The preparatory work for elevator installation outlined below should be undertaken by building contractors in accordance with Hitachi drawing and applicable national or local codes and regulation.
2. Prepare hoistway with proper framing and enclosure, suitable pit of proper depth with drains and water-proofing if required, properly lighted with concrete floor, access door, ladder and guards as required.
3. Provide and/or cut all necessary holes, chases, and openings and finish after equipment installation.
4. Supply and secure all supports, reinforced concrete slabs, etc., necessary for installation of the machinery, doors, buffers, etc.
5. Furnish all necessary cement and/or concrete for grouting-in of brackets, bolts, machine beams etc.
6. Prepare and erect suitable scaffolding and protective measures for the works in progress.
7. Furnish main for three-phase electric power and single-phase lighting supply to hoistway, following the instructions of the elevator contractors on outlet position and wire size.
8. Provide, free of charge, a suitable theft-proof storage area for materials and tools during erection work.
9. Supply electric power for lighting of work area, installation work, elevator testing and spray painting.
10. Suspension hooks at top of the hoistway with required loading as shown in this catalogue.