

# HOSPITAL BED ELEVATORS



H Y U N D A I • H O S P I T A L • B E D • E L E V A T O R S



# Hyundai Hospital Bed Elevators, a right choice for your hospital needs are designed to greatly contribute to provide the most secure and reliable ambience that your hospital requires.

Integrated into the system is such an advanced technology as VVVF (Variable Voltage Variable Frequency) inverter drive which serves the purpose of great cost reduction by innovative energy saving, as well as excellent riding comfort of elevators. Basically, Hyundai Hospital Bed Elevators are planned, designed and manufactured, bearing passengers security and convenience first in mind. The elegant designs and various features that these elevators show off are the key to enhancing the dignity of hospital facilities in addition to providing the amenities that hospital pursues.



## ELEVATORS

### Main advantages

- Superior riding
- Enhanced function of signal fixtures
- Self-checking system built in computer
- 50% energy saving (Compared to conventional AC control system)
- 50% reduction in building power requirement (Compared to conventional AC control system)





# Entrance designs

HYUNDAI HOSPITAL BED ELEVATOR

# HYUNDAI

## SPECIFICATIONS

### ▶ LANDING DOORS

Hairline-finished stainless steel

### ▶ JAMBS

Hairline-finished stainless steel

### ▶ TRANSOM PANEL

Hairline-finished stainless steel

### ▶ HALL BUTTON

HPB-442



HYUNDAI ELEVATORS

HYUNDAI HOSPITAL BED ELEVATORS

## SPECIFICATIONS

### CEILING

C-231A

### LIGHTING

Fluorescent lighting through milky-white acrylic lenses

### CAR DOORS, WALL PANELS

Etched stainless steel

### ENTRANCE COLUMNS

Hairline-finished stainless steel

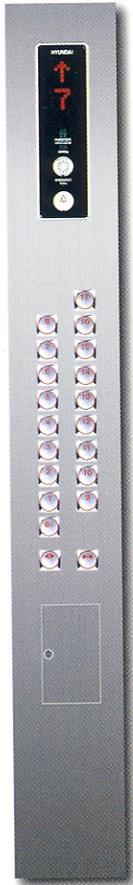
### FLOORING

PVC



# HYUNDAI HOSPITAL BED ELEVATORS

**CAR OPERATING PANELS**



OPP-D240A



OPP-N240W

Main car operating panel for the disabled person

HYUNDAI HOSPITAL BED ELEVATORS

**POSITION INDICATORS**



PI-D600



PI-D610

**HALL BUTTONS**

Hall buttons for the disabled person



HIP-D442B (Boxless)



HIP-D240A (Box Type)



HPB-D422B (Boxless)



HPB-D240 (Box Type)

**TYPE OF BUTTON**



A40



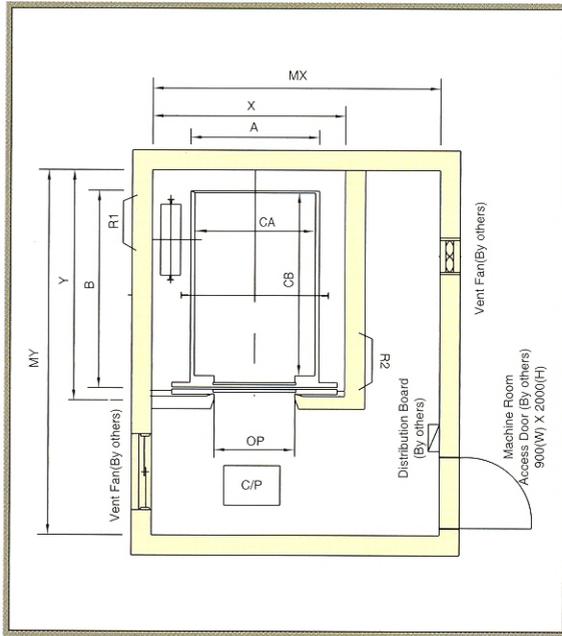
A41

# Installation Layout Plan & Standard Dimensions



## Plan of Hoistway & Machine Room

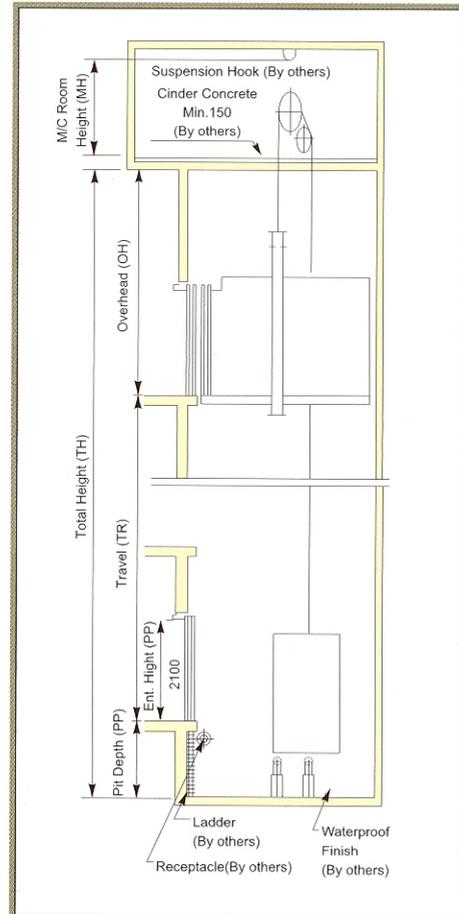
### Center Open Type



Speed (m/min)	Overhead (OH)	Pit (PP)	M/C Room Height (MH)
60	4600	1500	2200
90	4800	1800	2400
105	5000	2100	

- Note:1. Machine room temperature should be maintained below 40°C with ventilation fan and/or air conditioner, if necessary, and humidity below 90%.  
 2. In case of special hoistway, machine room height may be higher than above size.  
 3. Above is minimum size.

## Section of Hoistway



## Standard Dimensions & Reactions

(Unit:mm)

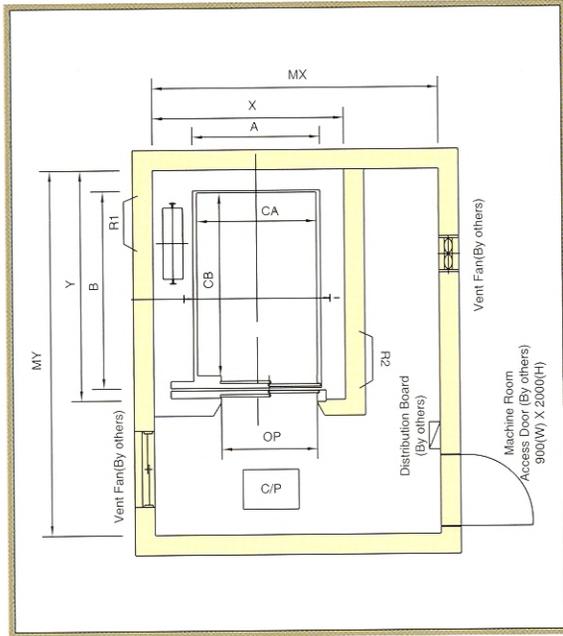
Model	Clear Opening OP	Car		Hoistway X x Y	M/C Room MX x MY	M/C Room Reaction(kgs)	
		Internal CA x CB	External A x B			R1	R2
B1000-CO60	1000	1500 x 2500	1560 x 2655	2350 x 3050	2750 x 4000	6800	4100
B1600-CO60, 90	1000	1500 x 2300	1600 x 2470	2400 x 2900	3000 x 4600	8500	6800
B1600-CO105	1100			2500 x 2900		8500	6800

- Note:1. 1600kg is applicable to china market.  
 2. Clear opening and car internal size can be changeable according to hoistway size.

# Installation Layout Plan & Standard Dimensions

## Plan of Hoistway & Machine Room

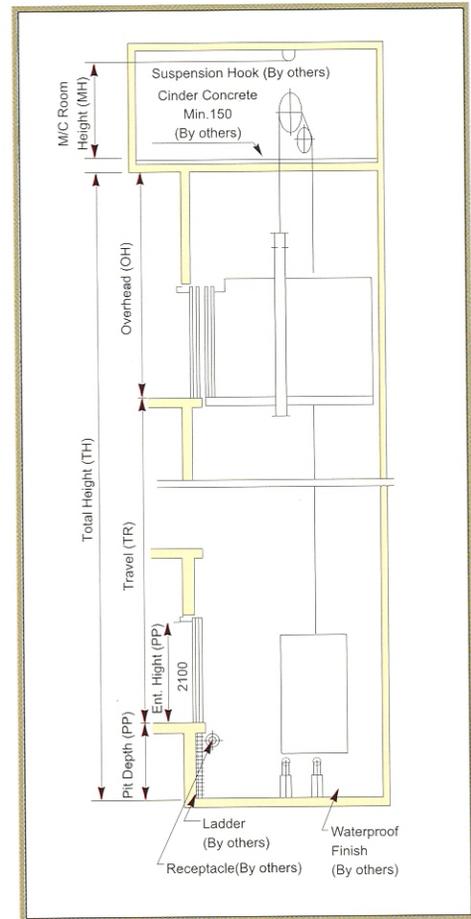
### Side Open Type



Speed (m/min)	Overhead (OH)	Pit (PP)	M/C Room Height (MH)
60	4600	1500	2200
90	4800	1800	2400
105	5000	2100	

- Note:1. Machine room temperature should be maintained below 40°C with ventilation fan and/or air conditioner, if necessary, and humidity below 90%.  
 2. In case of special hoistway, machine room height may be higher than above size.  
 3. Above is minimum size.

## Section of Hoistway



## Standard Dimensions & Reactions

(Unit:mm)

Model	Clear Opening	Car		Hoistway	M/C Room	M/C Room Reaction(kgs)	
		Internal	External			R1	R2
		OP	CA x CB				
B1000-SO60	1200	1500 x 2500	1560 x 2685	2300 x 3050	2750 x 4000	6800	4100
B1600-SO60, 90	1200	1500 x 2300	1600 x 2485	2400 x 2900	3000 x 4600	8500	6800
B1600-SO105						8500	6800

- Note:1. 1600kg is applicable to china market.  
 2. Clear opening and car internal size can be changeable according to hoistway size.

# Works to be done by Other Contractors

The followings are based on the general type.

## Electric power requirements (by others)

Capacity (kg)	Speed (m/min)	Motor (kW)	N.F.B. Rated Current (A)		Transformer Capacity (kVA)		Power feeder (mm <sup>2</sup> )		Earth wire (mm <sup>2</sup> )	
			1Car	2Cars	1Car	2Cars	1Car	2Cars	1Car	2Cars
1000	60	AC7.5	30	50	8	15	5.5	8	3.5	5.5
		AC11	50	75	12	22	8	14	5.5	8
	1600	90	AC15	50	75	15	26	8	22	5.5
AC18.5			75	100	15	25	14	30	8	8
	105	AC22	75	100	19	32	14	30	8	8

Notes: 1. The above power feeder sizes are based on its maximum length 50m. In case the feeder length from the transformer to the elevator machine room exceeds 50m, apply the following formula.

$$\text{Feeder Size (mm}^2\text{)} = \frac{\text{Feeder Length(m)}}{50} \times \text{size shown above}$$

2. The feeder sizes are based on using copper conductors and metallic conduit.  
3. For power requirement of 3 cars or more, consult Hyundai.

The following works are not included in the contract, and shall be done by other contractors in accordance with the Hyundai Elevator's drawings and the applicable codes and regulations.

## I. Building Work

### Hoistway

- 1) Clear, plumb hoistway with fire resistant hatch walls as required by the governing code.
- 2) 75° bevel guards on all projections, recesses or setbacks over 50mm except on side used for loading or unloading.
- 3) Venting of the hoistway as required by the governing code or authority.
- 4) Supports for rail brackets at each floor, roof, and machine room.  
Maximum allowable vertical spacing of rail supports without backing.  
Divider beams 100mm between hoistway at each floor and roof, for guide rail bracket supports.
- 5) Recess supports and patching as required, to accommodate hall button boxes, signal fixtures, etc.
- 6) All barricades either outside elevator hoistways or between elevators inside hoistways as required.
- 7) Dry pit reinforced to sustain normal vertical forces from rails and buffers.  
Consult Hyundai Elevator Company for rail forces and buffer impacts. Where there is space below the pit floor which can be occupied, consult Hyundai Elevator Company for special requirements.  
Cylinder hole, casings under the pit as required and backfilling around the cylinder casings when direct plunger type is to be installed.
- 8) Where access to the pit is by means of the lowest hoistway entrance, vertical iron ladder extending 1060mm minimum above sill of access door.

- 9) Entrance walls and finished floor are not to be constructed until after door frames and sills are in place. Door frames are to be anchored to walls and properly grouted in place to maintain legal fire rating.
- 10) Sill supports 64mm minimum floor recesses full hoistway width for entrance sills, with grouting after sills are set in place.
- 11) For application as indoor or outdoor observation elevator, a minimum 3.6m high glass enclosure above bottom landing is recommended for safety. For application as outdoor observation elevator, full height glass enclosure is required.

### Machine Room

- 12) Enclosed and protected machine room.
- 13) Access to the machine room and machinery space as required by the governing code or authority.
- 14) Reinforced concrete machine room floor slab or grating, as specified, which must not be placed over the hoistway until elevator machinery is set in position.
- 15) Hoisting beams, trap doors and other means of access to machine room for maintenance and equipment removal purposes.
- 16) Cable guards in the machine room or secondary level.
- 17) Supports for machine and sheave beams and reactions including wall pockets and patching after beams are set in place.

## II. Electrical Work

### Hoistway

- 1) Light outlet for each elevator in center of hoistway (or in machine room) as indicated by Hyundai Elevator Company.
- 2) Convenience outlet and light fixture in pit with switch located adjacent to the access door.
- 3) Wiring and piping work of emergency bell, interphone, etc. outside the hoistway and the machine room.

### Machine Room

- 4) Lighting, convenience outlets, ventilation, heating of machine room, and machinery space.
- 5) Temperature should be maintained below 40°C with ventilating fan and/or air conditioner, if necessary, and humidity below 90%.
- 6) A fused disconnect switch or circuit breaker for each elevator and light switch located per the governing code and where practicable located adjacent to the door of the machine room.
- 7) Feeder and branch wiring to the controller, including main-line switch and convenience outlets.
- 8) Suitable power feeder and branch wiring circuits as required for elevators with power operated door, including disconnect switch or circuit breaker.

### Emergency Provisions

- 9) Elevator fireman's and other emergency services wiring and interconnections to automatic sprinkler systems or heat and smoke sensing devices furnished by others and installed to terminal points on the elevator controllers.
- 10) When emergency power operation of elevators is required, the electrical contractor should coordinate with Hyundai Elevator Company or local distributor for operation requirements.
- 11) Elevator fireman's and other emergency service requirements may differ from each country. Consult Hyundai Elevator Company or local distributor for other local requirements.
- 12) When provisions for earthquake protection are required, consult Hyundai Elevator Company for special requirements.

### Heat Emission of Machine Room

$$Q(\text{kcal/H}) = W \times V \times F \times N$$

W : Capacity(kg)      N : Number of Cars  
V : Speed              F : 1/40:VVVF  
F : Factor



We reserve the right to change designs and specifications for the product development without prior notice.

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Hospital Bed Elevators  
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# HOSPITAL BED ELEVATORS



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