

Passenger Elevator:**Medium Speed Traction Elevators**

- VVVF(Variable Voltage Variable Frequency) elevator system adopted the
 - ▣ Converter and
 - ▣ Inverter units
 with the highly sophisticated microprocessor-based PWM(Pulse Width Modulation) control system for its simultaneous control of the voltage and frequency.
- The converter unit first rectifies the supplied AC power to DC power. Then the inverter drive unit and the PWM control system inverts the DC power to electronically regulated, variable voltage and variable frequency AC power, the most optimum and ideal power supply for the drive of the induction motor. Thus, the control and drive system has become highly efficient.

Control System

- ▣ VVVF (inverter) Microprocessor Control

Operation

- ▣ 1 car/ 2 cars: Selective collective (1C/2C 2BC)
- ▣ 3-8 cars : Group Operation

Speed

- ▣ 60, 90, 105m/min

Capacity

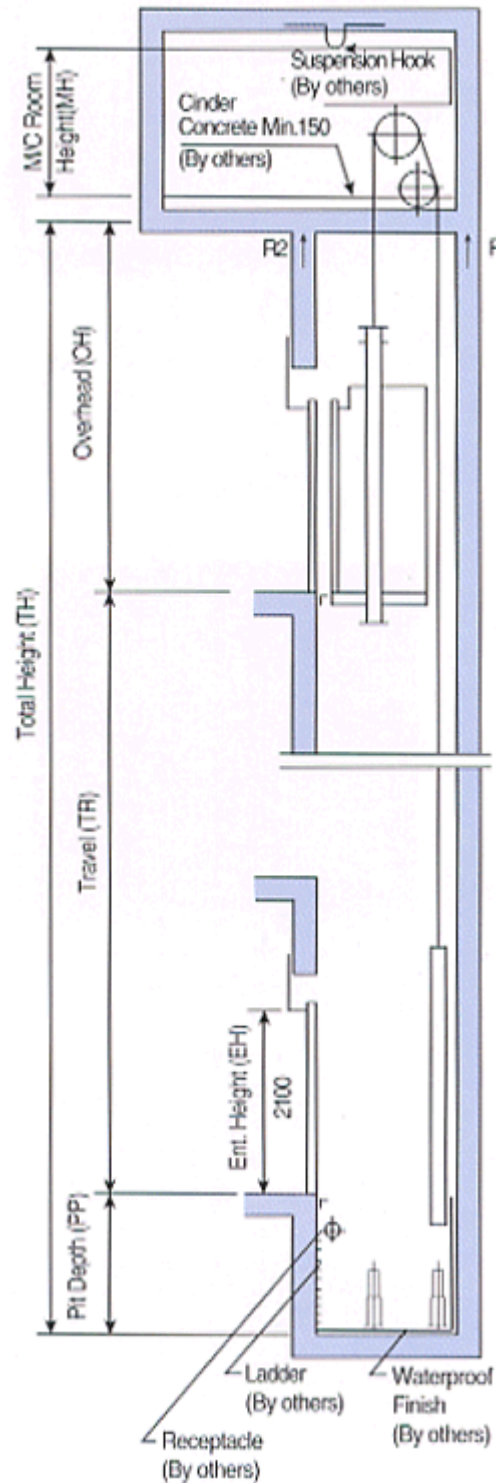
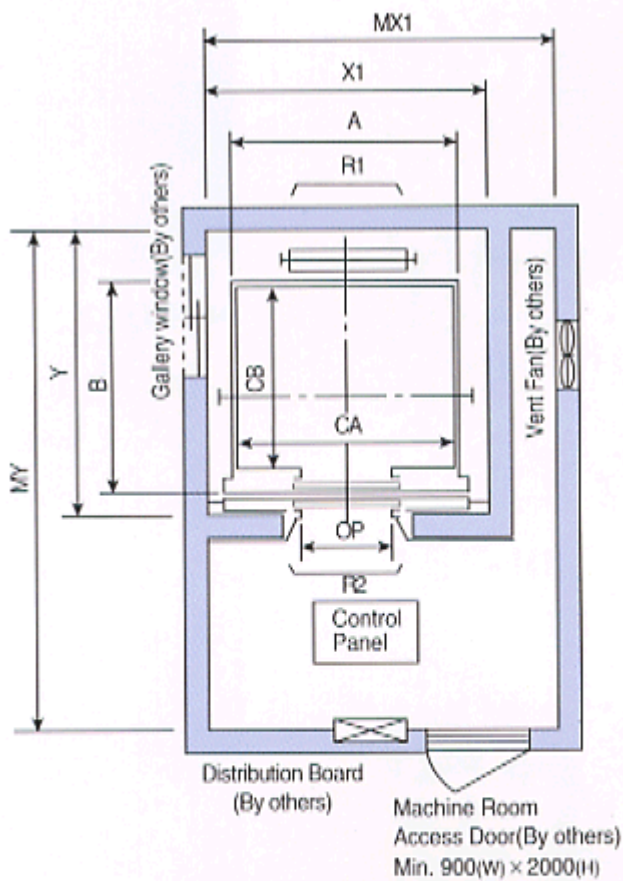
- ▣ 6~24 persons/450~1600kg

Main advantages

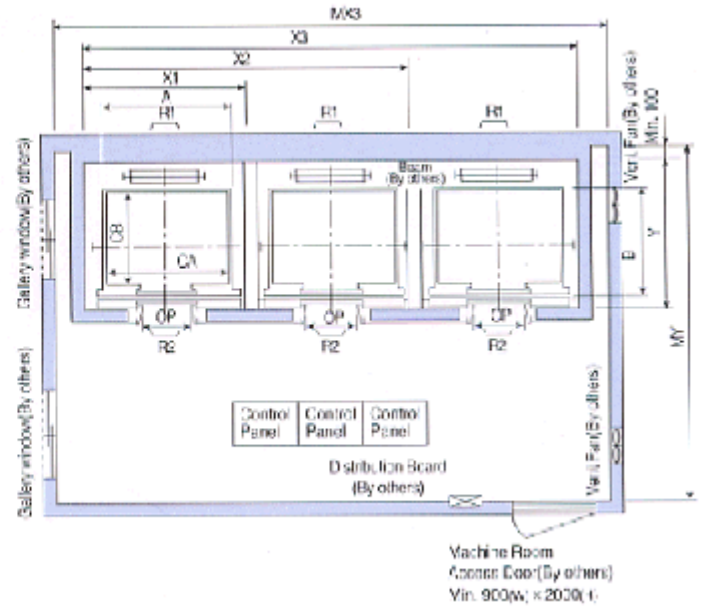
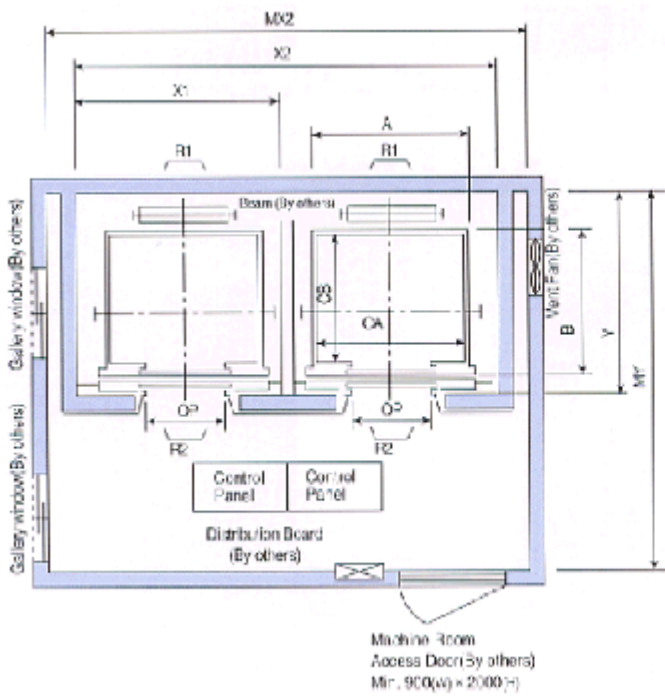
- ▣ Superior riding and accurate landing
- ▣ Inverter(VVVF) drive system with DSP(Digital Signal Processor)
- ▣ Quiet and safe inverter door system(A gap between car sill and hatch sill is 25mm)
- ▣ Self-checking system built in inside computer
- ▣ Compact design(Minimized control panel size)
- ▣ Reduced installation and maintenance cost
- ▣ Meet ASME 17.1A, BS, JIS code requirements

Medium Speed Traction Elevators "Layout Plan & Standard Dimensions"

● Section of Hoistway



Notes:
 Machine room temperature should be maintained below 40°C with ventilating fan and /or air conditioner (if necessary) and humidity below 90%.



Standard Dimensions & Reactions

(Unit:mm)

Speed (m/min)	Capacity		Clear Openin g	CAR		Hoistway				M/C Room				M/C Room Reaction (kg)	
	pers ons	kg		Internal	External	1Car	2Car s	3Car s	Dept h	1Car	2Cars	3Cars	Depth	R1	R2
			OP	CAxCB	AxB	X1	X2	X3	Y	MX1	MX2	MX3	MY		
45 60 90 105	6	450	800	1400x850	1460x1005	1800	3700	5600	1480	2000	4000	6000	3200	3600	2000
	8	550	800	1400x1030	1460x1185	1800	3700	5600	1660	2000	4000	6000	3400	4050	2250
	9	600	800	1400x1100	1460x1255	1800	3700	5600	1730	2000	4000	6000	3500	4100	2450
				1400x1150	1460x1305	1800	3700	5600	1780	2000	4000	6000	3550		
	10	680	800	1400x1250	1460x1405	1800	3700	5600	1880	2000	4000	6000	3600	4200	2700
	11	750	800	1400x1350	1460x1505	1800	3700	5600	2000	2000	4000	6000	3700	4550	2800
	13	900	900	1600x1350	1660x1505	2050	4200	6350	2000	2300	4400	6800	3750	5100	3750
				1600x1400	1660x1555	2050	4200	6350	2050	2300	4400	6800	3800		
	15	1000	900	1600x1500	1660x1655	2050	4200	6350	2150	2300	4400	6800	3850	5450	4300
				1600x1550	1660x1705	2050	4200	6350	2200	2300	4400	6800	3900		
	17	1150	1000	1800x1500	1900x1670	2350	4800	7250	2280	2600	4900	7500	3900	6600	5100
			1100	2000x1350	2100x1520	2550	5200	7850	2130	2800	5250	8300	3800		
20	1350	1000	1800x1700	1900x1870	2350	4800	7250	2480	2600	4900	7500	4200	7800	6000	
			1800x1730	1900x1900	2350	4800	7250	2510	2600	4900	7500	4300			
			2000x1500	2100x1670	2550	5200	7850	2280	2800	5250	8300	4000			
24	1600	1100	2000x1550	2100x1720	2550	5200	7850	2330	2800	5250	8300	4100	8500	6800	
			2000x1750	2100x1920	2550	5200	7850	2530	2900	5400	8300	4300			
			2000x1800	2100x1970	2550	5200	7850	2580	2900	5400	8300	4400			
			2150x1600	2250x1770	2700	5500	8300	2380	3000	5650	8700	4200			
			2150x1670	2250x1840	2700	5500	8300	2450	3000	5650	8700	4300			

Notes)

- I.* White colored dimensions shall be applied for Malaysia & Singapore market.
- II.* Above hoist way dimensions are based on 15-storied buildings. For application to over 16-storied buildings, the hoistway dimensions shall be at least 5% larger considering the sloping of the hoistways.
- III.* Above dimensions are based on center opening doors.
- IV.* The capacity in persons is calculated at 68kg/person.

Speed(m/min)	Overhead(OH)	Pit(PP)	M/C Room Height (MH)
45	4400	1200	2200
60	4600	1500	2200
90	4800	1800	2400
105	5000	2100	2400

Note: Above is minimum size

(Unit: mm)