

HGE

Machine Room Elevator Planning Guide

The information in this catalogue is subject to change without notice. The information and diagram in this catalogue reflect the technical features and configuration of the elevator model at press time (refer to the version number). In line with the principle of continuous development of products, our company reserves the right to change the selection of product technical parameters and colour at any time. The existing image technology cannot accurately reproduce the elevator component structure and decoration colour. Therefore, this catalogue only provides general information, not as a contract document. The specific configuration parameters are subject to the formal agreement.

If you need detailed information, please contact us.

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Civil Works Matters

No. of Passengers ①	Rated Load (kg)	Rated Speed (m/min)	Maximum Number of Stops	Maximum Travel (m)	Maximum Travel with Fireman Operation (m)	Minimum Floor Height (mm)
6	450	60/90/105	60m/min:22 90m/min:24 105m/min:24	60	—	2800
8	630	60/90/105	60m/min:22 90m/min:32 105m/min:32 120m/min:40 150m/min:40	60m/min:60 90m/min:100 105m/min:100 120m/min:120 150m/min:120		
11	825	60/90/105/ 120/150			60m/min:58 90m/min:86 105m/min:99.5 120m/min:114 150m/min:120	
12	900					
14	1050					
15	1150					
16	1200					
18	1350					
21	1600					

Note:
① Passenger numbers calculated at 75kg per person.
② The above information is based on GB7588-2003 standards.

Elevator Function

Standard Function

Control System			
SA1	Selective Collective Control	SA2	Floor Height Self Measurement
SA3	On-Cage (Car Top) Maintenance Operation	SA4	In-Cage Slow Speed Operation
SA5	Machine Room Debugging Operation		
System Protection			
SB1	Overspeed Electrical Protection	SB2	Overspeed 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 Check Operation
SB9	Synchronous Motor Magnetic Pole Test	SB10	Lift-Position Abnormity Auto-Correction Function
SB11	Nearest Landing Operation	SB12	Anti-Electromagnetic Interference
SB13	Unintended Car Movement Protection, UCMP Function ①	SB14	Intelligent Auxiliary Brake Function
SB15	Ascending Car Overspeed Protection, ACOP Function		
Safe Communication			
SC1	Car Intercom Communication	SC2	Car Top Intercom Communication
SC3	Pit Intercom Communication		
Safe Riding			
SD1	Alarm System	SD2	Door Safety Return System
SD3	Full Load Bypass Operation	SD4	Overload Detection System
SD5	Overload Alarm	SD6	Next Drive (Door Open Abnormity)
SD7	Door Opening/Closing Time Abnormity Protection	SD8	Automatic Door Dwell Time Control
SD9	Automatic Door Dwell Time Adjustment	SD10	Number of Runs Indicator
SD11	Intelligent Multi-Beam Protection ①	SD12	Maintenance Indication at Hall Indicator ①
SD13	Overload Indicator (In Car)		
Emergency Solution			
SE1	Out of Door-Open Zone Alarm	SE2	Car Emergency Lighting
SE3	Fire Emergency Operation (Automatic)		
Design for Comfort			
SF1	Parking Operation	SF2	Automatic Return Function
SF3	Start Torque Auto-Adjustment	SF4	Door-Stop Function (Maintenance)
SF5	Micro Levelling (Travel ≥ 45m)	SF6	Advance Door Opening ① (For Rated Speed ≥ 120m/min and Travel ≥ 45m)
SF7	Mischievous Call Cancellation (Applicable for Simplex and Duplex only)	SF8	Opposite Direction Car Call Cancellation
SF9	Car Light Auto Turn-Off	SF10	Car Fan Auto Turn-Off
SF11	Car Floor Button Flashing	SF12	Step-Less Speed Control
SF13	Door Bypass Detection		

Note:
① For details, please contact us.

Elevator Function

Optional Function

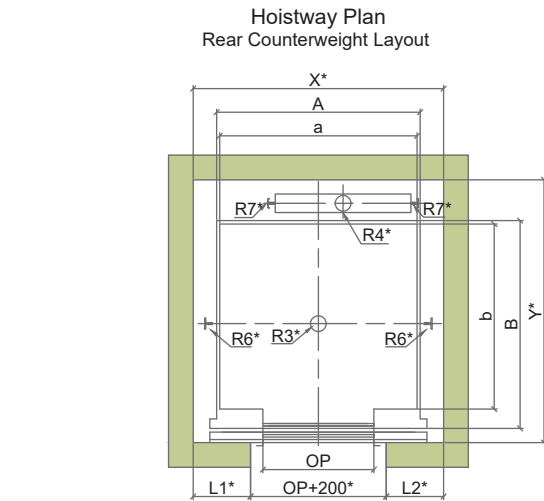
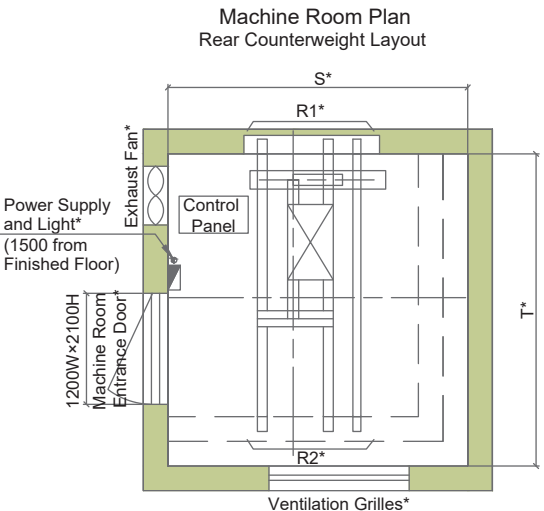
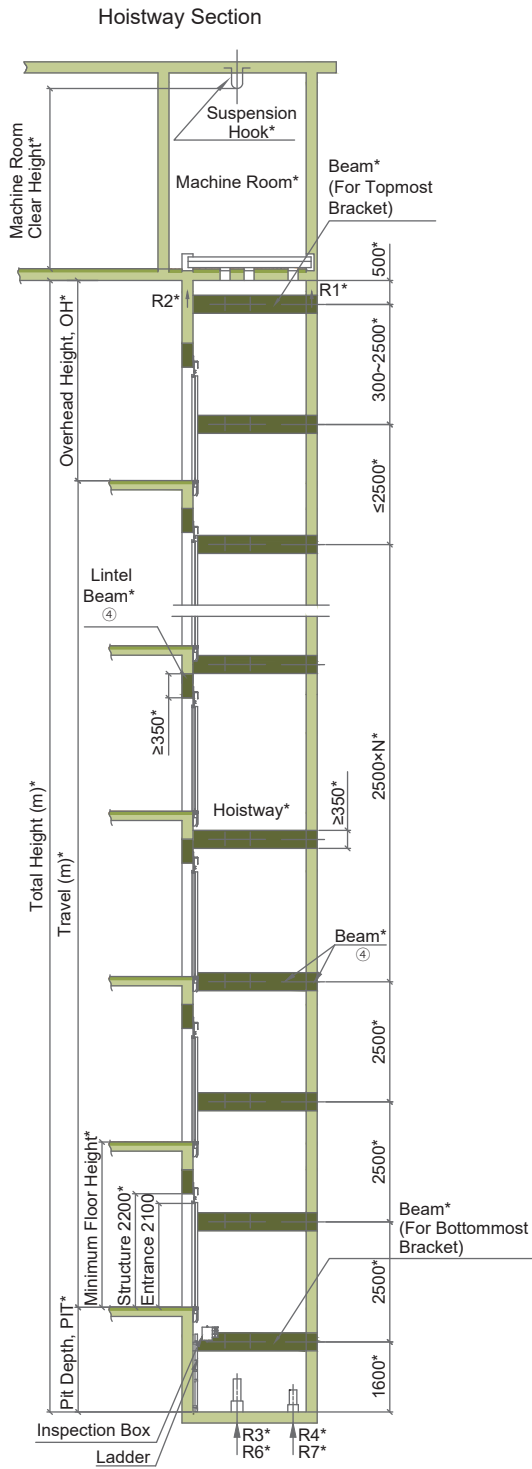
Control System			
OA1	Duplex Collective Control	OA2	FI-10 Group Control System (Maximum 4 Cars Group)
OA3	Independent Automatic Operation (For Duplex and Group Control) ①		
Safe Communication			
OB1	Interphone System (5 Ways) (5 Ways: Monitoring Center, Machine Room, In Car, Car Top and Pit)		
Safe Riding			
OC1	IC Card System (In Car) (Not Applicable with OC2, OC4, OC5 or OE5)	OC2	IC Card System (Hall) (Not Applicable with OC1, OC4, OC5 or OE5)
OC3	Multi-Beam + Safety Edge Protection	OC4	Hitachi Smart Security [ITM] Interface (Not Applicable with OC1, OC2, OC5 or OE5)
OC5	Building Intercom Linkage Interface (RS485 / Dry Contact) (Not Applicable with OC1, OC2, OC4 or OE5)	OC6	Contact at Control Panel (RS485)
OC7	Contact at Control Panel (Dry Contacts) (Not Applicable with OC8)	OC8	Supervisory Panel (Dry Contact Type) (Not Applicable with OC7)
OC9	Elevator Monitoring System (Computer Type)	OC10	Twisted Pair Cable (1 Pair) for CCTV Interface
OC11	Twisted Pair Cable (1 Pair) for BGM Interface		
Emergency Solution			
OD1	Fireman Operation (Rated Load ≥ 825kg)	OD2	Automatic Rescue Device (ARD) (Maximum Travel Distance Between Landings ≤ 30m)
OD3	Pit Flood Operation		
Design for Comfort			
OE1	Attendant Operation	OE2	Independent Operation
OE3	Voice Synthesiser	OE4	Arrival Chime (Car Top)
OE5	Floor Lockout Operation (Not Applicable with OC1, OC2, OC4 or OC5)	OE6	Quick Door Closing Function (In Car)
OE7	Sub Car Operating Panel	OE8	Double Opening Function
OE9	Horizontal Car Operating Panel	OE10	Braille Button
OE11	Operation Status Indication at Hall Indicator ①	OE12	Car Call Deselect Function
OE13	Hall Call Deselect Function ① (Not applicable with OE8)	OE14	Door Nudging Operation (Only Applicable with OC3)
OE15	Micro Levelling (Travel < 45m)	OE16	Advance Door Opening ①
OE17	Elevator Specific Floor Door Opening Inspection Function ①	OE18	Current Floor Push-Button Reopening Function
OE19	Regenerative System Function ①	OE20	Overloading Hall Call Recovery Function
OE21	Abnormal Duration Hall Call Detection		

Note:
① For details, please contact us.

Hoistway and Machine Room

The followings shall be furnished by building contractors:

- Building Structure
- Wall and Floor Finishes
- Beam



- Note:
- ① The above information is based on GB7588-2003 standards.
 - ② Items with "*" shall be furnished by building contractors.
 - ③ Unit of dimension shall be in mm unless otherwise stated.
 - ④ 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.
 - ⑤ For hoistway and machine room details, please contact us.
 - ⑥ The suspension hooks capacity shall be as follows:

Rated Load (kg)	Rated Speed (m/min)	Machine Room Clear Height (mm)	Suspension Hook Capacity (Tons)
450/630/825/900/1050	60/90/105	2100	3
825/900/1050	120/150	2450	4

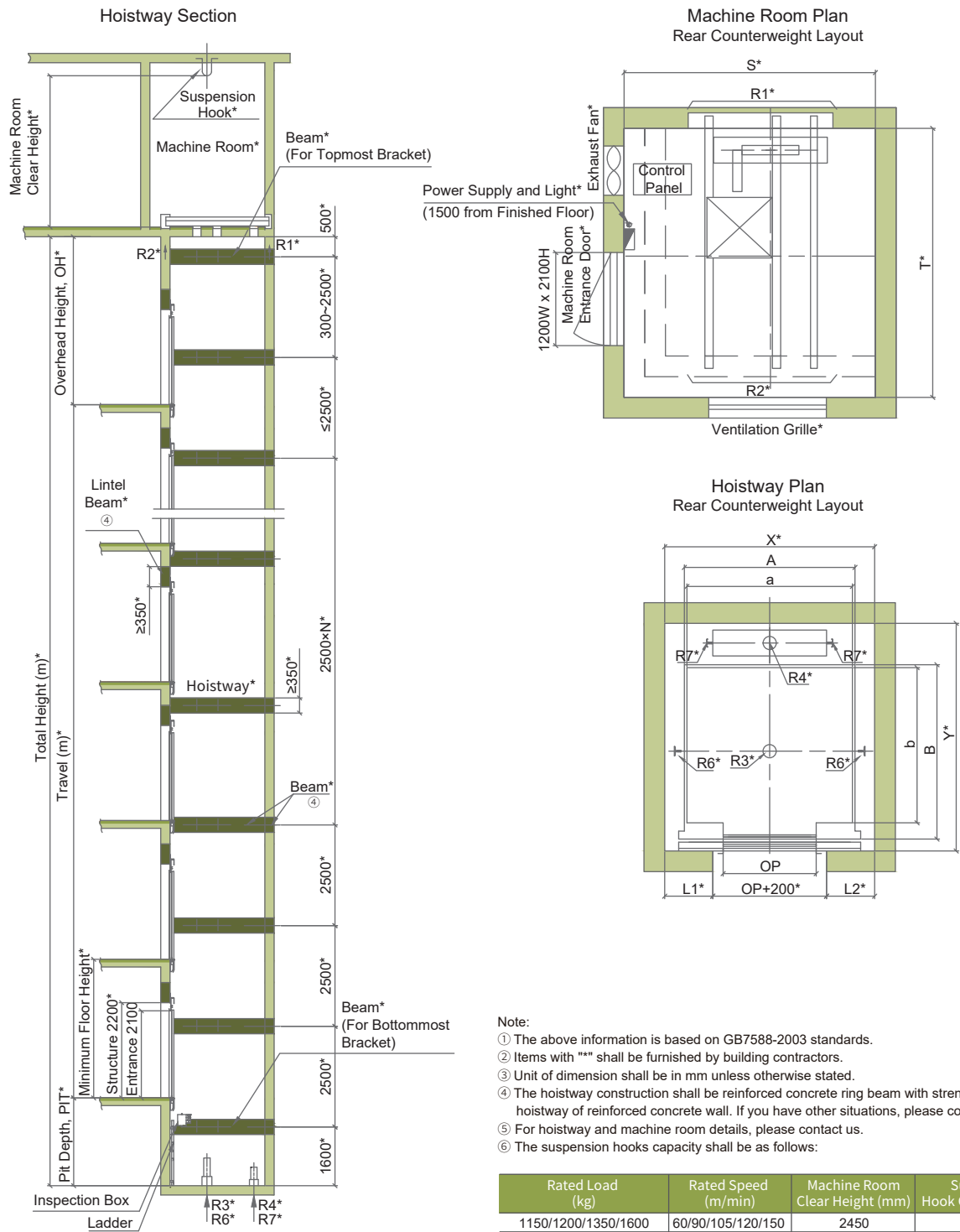
Hoistway and Machine Room

Rated Load (kg)	Rated Speed (m/min)	Car Size (mm)		Door Opening (mm)		Front Wall Arrangement (mm)		Hoistway Size (mm)	Machine Room Size (mm)	Machine Room Reaction Force (KN)		Pit Reaction Force (KN)			
		Car Inside (axb)	Car Outside (AxB)	Type	Width OP	L1	L2	X×Y	S×T	R1	R2	R3	R4	R6	R7
450	60	1200×1000	1250×1185	2P-CO	800	375	375	1750×1580	1800×1880	48.5	30	95	82	29	3
	90									51	31.5	101	88	34	5
	105														
630	60	1400×1100	1450×1285	2P-CO	800	415	415	1830×1680	1830×1900	48.5	30	95	82	29	3
	90									51	31.5	101	88	34	5
	105														
825	60	1400×1350	1450×1535	2P-CO	800	415	415	1830×1930	1830×1930	58	34.5	113	95	37	3
	90									61	36	120	103	44	5
	105					425	425	1850×1950	1900×1950	73.2	47	153	132	55	7
	120									78	48	160	148	57	7
	150														
	60	1400×1300	1450×1485	2P-CO	800	415	415	1830×1930	1830×1930	58	34.5	113	95	37	3
	90									61	36	120	103	44	5
	105					425	425	1850×1900	1900×1900	73.2	47	153	132	55	7
	120									78	48	160	148	57	7
	150														
	60	1300×1400	1350×1585	2P-CO	800	415	415	1830×1980	1830×1980	58	34.5	113	95	37	3
	90									61	36	120	103	44	5
	105					425	425	1850×2000	1875×2000	73.2	47	153	132	55	7
	120									78	48	160	148	57	7
	150														
900	60	1600×1350	1650×1535	2P-CO	900	465	465	2030×1930	2030×1930	63	37	122	103	40	3
	90									67	39	131	112	48	5
	105					475	475	2050×1950	2050×1950	74.5	48	158	136	58	7
	120									82	50	165	160	61	7
	150														
1050	60	1600×1500	1650×1685	2P-CO	900	465	465	2030×2080	2030×2080	66	40	135	113	42	3
	90									69.5	42	145	123	50	5
	105					475	475	2050×2100	2050×2100	78	48.5	166	140	60	7
	120									89	55	175	168	64	7
	150														
	60	1600×1400	1650×1585	2P-CO	900	465	465	2030×1980	2030×1980	66	40	135	113	42	3
	90									69.5	42	145	123	50	5
	105					475	475	2050×2000	2050×2000	78	48.5	166	140	60	7
	120									89	55	175	168	64	7
	150														
	60	1500×1500	1550×1685	2P-CO	900	430	430	1960×2080	1960×2080	66	40	135	113	42	3
	90									69.5	42	145	123	50	5
	105					450	450	2000×2100	2000×2100	78	48.5	166	140	60	7
	120									89	55	175	168	64	7
	150														
	60	1400×1600	1450×1785	2P-CO	900	430	430	1960×2180	1960×2180	66	40	135	113	42	3
	90									69.5	42	145	123	50	5
	105					450	450	2000×2200	2000×2200	78	48.5	166	140	60	7
	120									89	55	175	168	64	7
	150														
60	1500×1600	1550×1785	2P-CO	900	430	430	1960×2180	1960×2180	66	40	135	113	42	3	
90									69.5	42	145	123	50	5	
105					450	450	2000×2200	2000×2200	78	48.5	166	140	60	7	
120									89	55	175	168	64	7	
150															

- Note:
- ① The above information is based on GB7588-2003 standards.
 - ② The above information and configuration are based on rear counterweight layout.
 - ③ Configuration is without counterweight safety gear.

The followings shall be furnished by building contractors:

- Building Structure
- Wall and Floor Finishes
- Beam



- Note:
- ① The above information is based on GB7588-2003 standards.
 - ② Items with "*" shall be furnished by building contractors.
 - ③ Unit of dimension shall be in mm unless otherwise stated.
 - ④ 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.
 - ⑤ For hoistway and machine room details, please contact us.
 - ⑥ The suspension hooks capacity shall be as follows:

Rated Load (kg)	Rated Speed (m/min)	Machine Room Clear Height (mm)	Suspension Hook Capacity (Tons)
1150/1200/1350/1600	60/90/105/120/150	2450	4

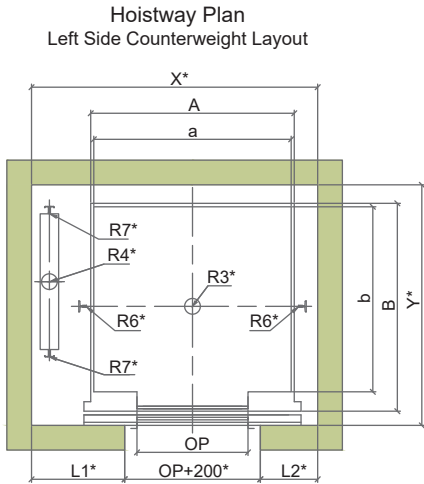
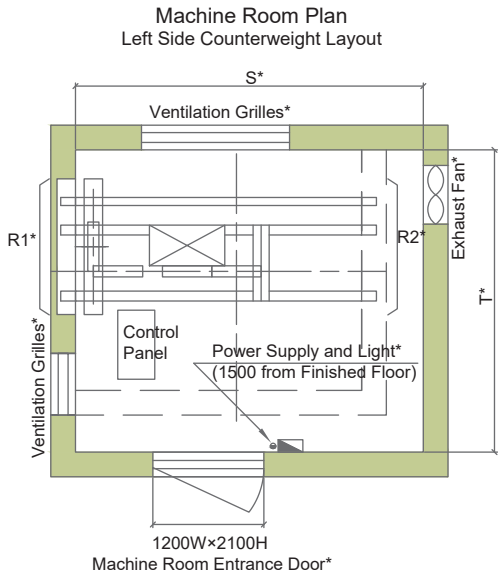
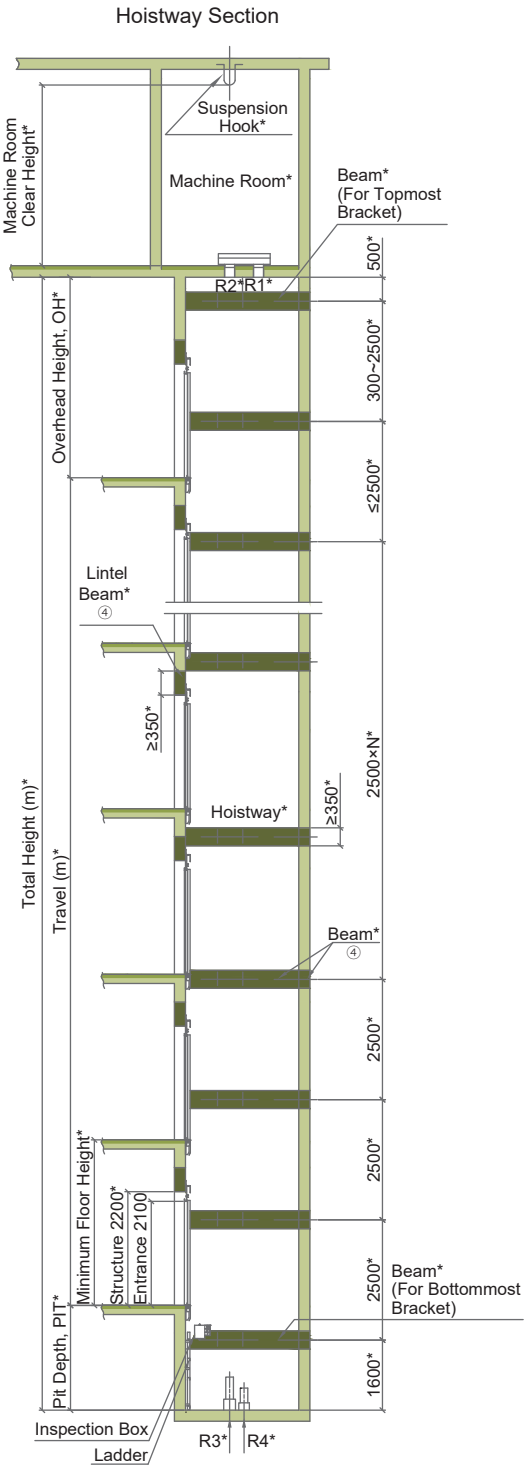
Rated Load (kg)	Rated Speed (m/min)	Car Size (mm)		Door Opening (mm)		Front Wall Arrangement (mm)		Hoistway Size (mm)	Machine Room Size (mm)	Machine Room Reaction Force(KN)		Pit Reaction Force (KN)			
		Car Inside Size (axb)	Car Outside Size (AxB)	Type	Width OP	L1	L2	X×Y	S×T	R1	R2	R3	R4	R6	R7
1150	60	1800×1500	1850×1685	2P-CO	900	600	600	2300×2200	2300×2200	82	54	165	154	51	5.5
	90									89	58	183	175	58	9
	105									92	60	192	184	68	13
	120														
	150														
1200	60	1700×1600	1750×1785	2P-CO	900	550	550	2200×2300	2300×2300	82	54	165	154	51	5.5
	90									89	58	183	175	58	9
	105									92	60	192	184	68	13
	120														
	150														
1350	60	2000×1500	2050×1685	2P-CO	1100	625	625	2550×2200	2550×2200	116	91	201	171	66	11
	90									131	96	233	202	76	15
	105									136	101	243	212	91	16
	120														
	150														
1600	60	2000×1750	2050×1935	2P-CO	1100	625	625	2550×2450	2550×2450	126	96	211	181	71	11
	90									136	101	243	212	81	15
	105									141	101	263	222	96	16
	120														
	150														

- Note:
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 - ② The above information and configuration are based on right side counterweight layout.
 - ③ Configuration is without counterweight safety gear.

Hoistway and Machine Room

The followings shall be furnished by building contractors:

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 - ④ 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.
 - ⑤ For hoistway and machine room details, please contact us.
 - ⑥ The suspension hooks capacity shall be as follows:

Rated Load (kg)	Rated Speed (m/min)	Machine Room Clear Height (mm)	Suspension Hook Capacity (Tons)
450/630/825/900/1050	60/90/105	2100	3
825/900/1050	120/150	2450	4

Hoistway and Machine Room

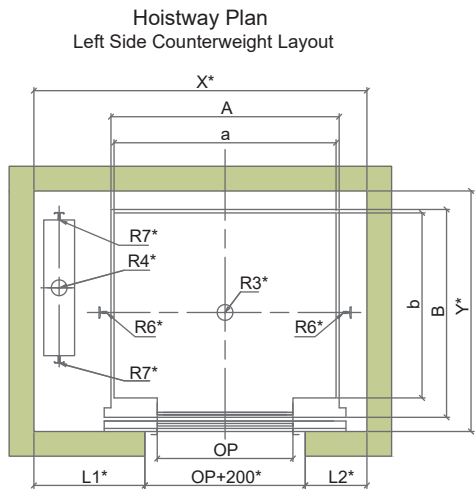
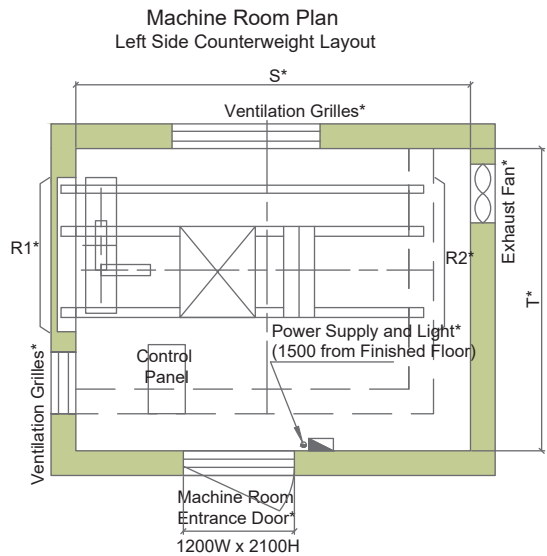
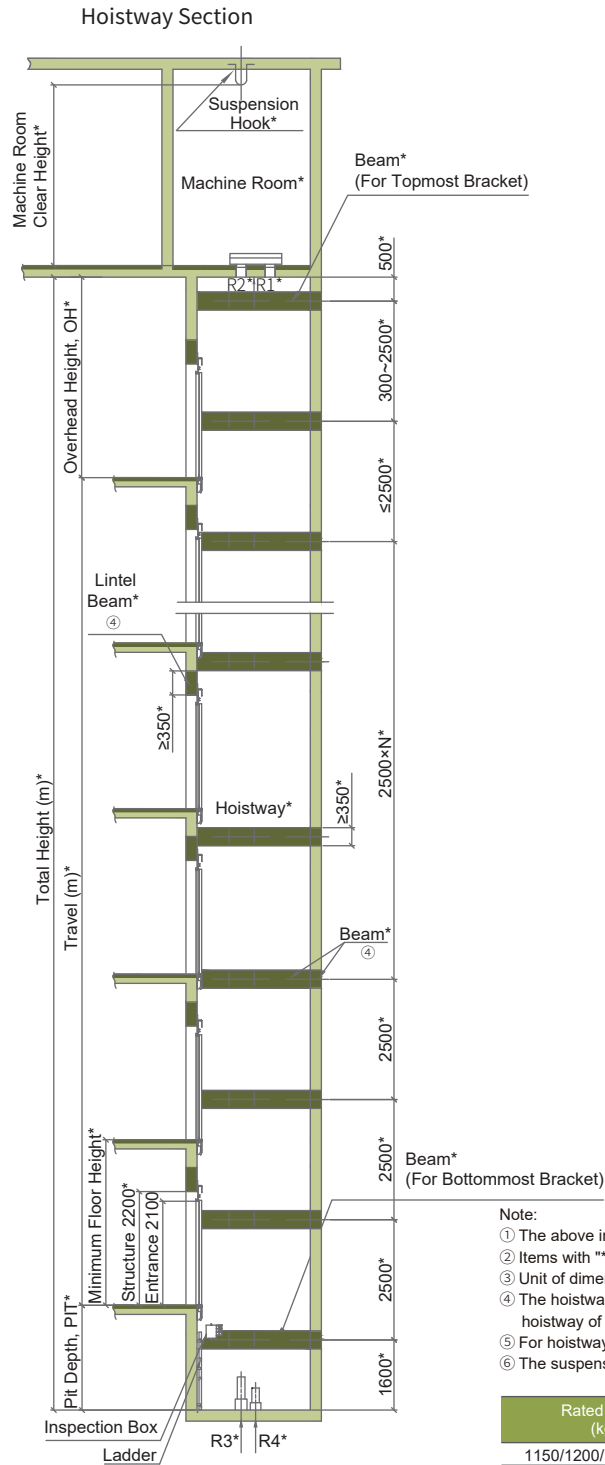
Rated Load (kg)	Rated Speed (m/min)	Car Size (mm)		Door Opening (mm)		Front Wall Arrangement (mm)		Hoistway Size (mm)	Machine Room Size (mm)	Machine Room Reaction Force (KN)		Pit Reaction Force (KN)			
		Car Inside (axb)	Car Outside (AxB)	Type	Width OP	L1	L2			X×Y	S×T	R1	R2	R3	R4
450	60	1400×900	1450×1085	2P-CO	800	700	400	2100×1300	2150×1720	48	31	95	82	29	3
	90									50.5	32	101	88	34	5
	105														
630	60	1400×1100	1450×1285	2P-CO	800	735	415	2150×1550	2200×1750	48	31	95	82	29	3
	90									50.5	32	101	88	34	5
	105														
825	60	1400×1350	1450×1535	2P-CO	800	705	415	2120×1800	2120×1850	56.5	37	113	95	37	3
	90									59.5	38.5	120	103	44	5
	105														
	120					725	425	2150×1800	2150×1850	67	46.5	140	125	54	7
	150							2150×1850	2150×1900	75	48	150	145	58	7
	60	1400×1300	1450×1485	2P-CO	800	705	415	2120×1800	2120×1850	56.5	37	113	95	37	3
	90									59.5	38.5	120	103	44	5
	105														
	120					725	425	2150×1800	2150×1850	67	46.5	140	125	54	7
	150							2150×1850	2150×1900	75	48	150	145	58	7
	60	1300×1400	1350×1585	2P-CO	800	655	385	2040×1850	2040×1850	56.5	37	113	95	37	3
	90									59.5	38.5	120	103	44	5
	105														
	120					675	400	2075×1850	2075×1850	67	46.5	140	125	54	7
	150							2075×1900	2075×1900	75	48	150	145	58	7
900	60	1600×1350	1650×1535	2P-CO	900	755	465	2320×1800	2320×1850	61.5	39	122	103	40	3
	90									64.5	40.5	131	112	48	5
	105									775	475	2350×1800	2350×1850	72	48
	120					2350×1850	2350×1900	82	50			165	160	61	7
	150														
1050	60	1600×1500	1650×1685	2P-CO	900	755	465	2320×1950	2320×1950	67.6	40.2	135	113	42	3
	90									70.4	42.1	145	123	50	5
	105									775	475	2350×1950	2350×1950	80	50.5
	120					89	55	175	165					65	7
	150					67.6	40.2	135	113					42	3
	60	1600×1400	1650×1585	2P-CO	900	755	465	2320×1850	2320×1850	67.6	40.2	135	113	42	3
	90									70.4	42.1	145	123	50	5
	105									775	475	2350×1850	2350×1850	80	50.5
	120					2350×1900	2350×1900	89	55			175	165	65	7
	150														
	60	1500×1500	1550×1685	2P-CO	900	705	430	2235×1950	2235×1950	67.6	40.2	135	113	42	3
	90									70.4	42.1	145	123	50	5
	105									725	450	2275×1950	2275×1950	80	50.5
	120					89	55	175	165					65	7
	150					67.6	40.2	135	113					42	3
	60	1400×1600	1450×1785	2P-CO	900	655	430	2185×2050	2185×2050	67.6	40.2	135	113	42	3
	90									70.4	42.1	145	123	50	5
	105									675	450	2225×2050	2225×2050	80	50.5
	120					89	55	175	165					65	7
	150														
60	1500×1600	1550×1785	2P-CO	900	705	430	2235×2050	2235×2050	67.6	40.2	135	113	42	3	
90									70.4	42.1	145	123	50	5	
105									725	450	2275×2050	2275×2050	80	50.5	165
120					89	55	175	165					65	7	
150															

- Note:
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 - ② The above information and configuration are based on left side counterweight layout.
 - ③ Configuration is without counterweight safety gear.

Hoistway and Machine Room

The followings shall be furnished by building contractors:

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- Beam



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 - ⑤ For hoistway and machine room details, please contact us.
 - ⑥ The suspension hooks capacity shall be as follows:

Rated Load (kg)	Rated Speed (m/min)	Machine Room Clear Height (mm)	Suspension Hook Capacity (Tons)
1150/1200/1350/1600	60/90/105/120/150	2450	4

Hoistway and Machine Room

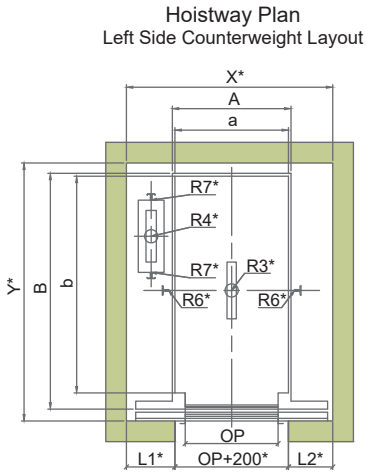
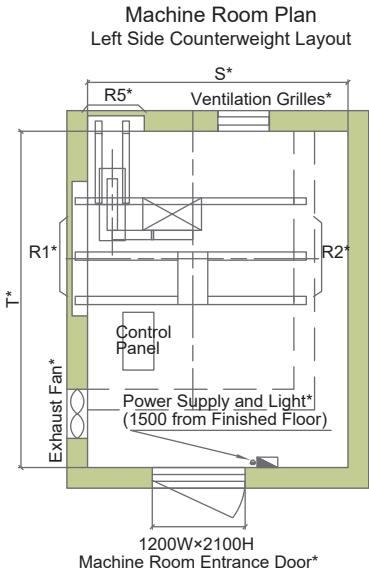
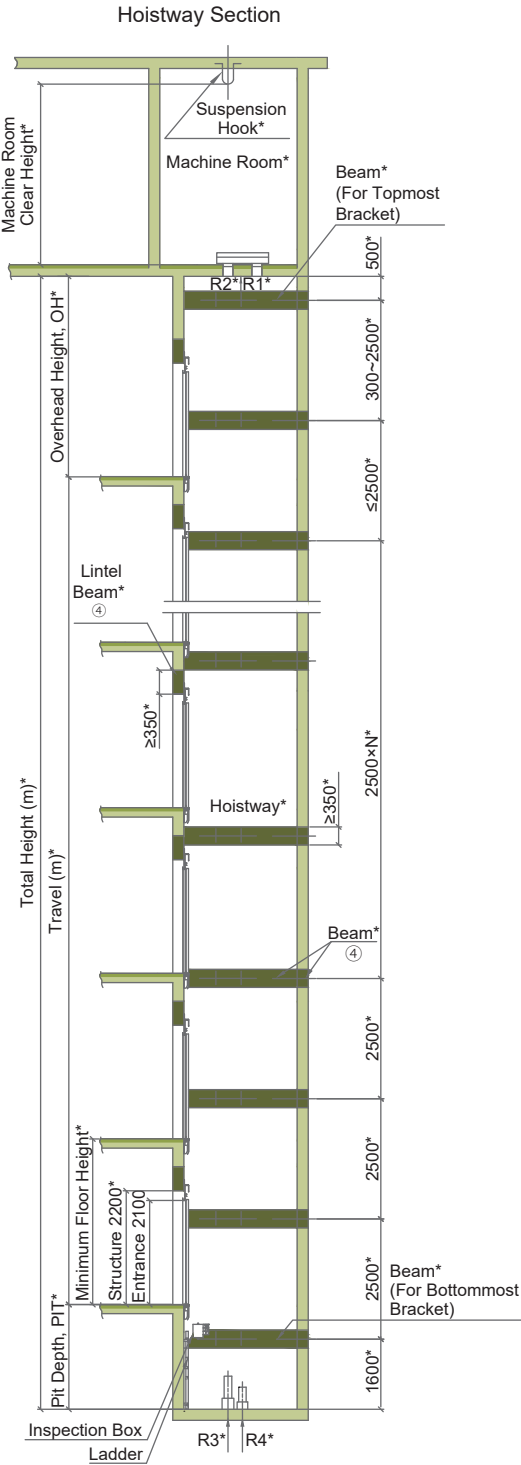
Rated Load (kg)	Rated Speed (m/min)	Car Size (mm)		Door Opening (mm)		Front Wall Arrangement (mm)		Hoistway Size (mm)	Machine Room Size (mm)	Machine Room Reaction Force(KN)		Pit Reaction Force (KN)			
		Car Inside Size (axb)	Car Outside Size (AxB)	Type	Width OP	L1	L2			X×Y	S×T	R1	R2	R3	R4
1150	60	1800×1500	1850×1685	2P-CO	900	1000	600	2700×1950	2700×1950	86	49	162	150	55	5.5
	90									94	51	182	170	62	9
	105									98	55	191	182	71	13
1200	60	1700×1600	1750×1785	2P-CO	900	950	550	2600×2050	2600×2050	86	49	162	150	55	5.5
	90									94	51	182	170	62	9
	105									98	55	191	182	71	13
	120														
	150														
1350	60	2000×1500	2050×1685	2P-CO	1100	1025	625	2950×1950	2950×2100	126	86	201	171	66	11
	90									136	91	233	202	76	15
	105									141	96	243	212	91	16
	120														
	150														
1600	60	2000×1750	2050×1935	2P-CO	1100	1025	625	2950×2200	2950×2250	131	91	211	181	71	11
	90									141	96	243	212	81	15
	105									145	99	263	222	96	16
	120														
	150														

- Note:
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 - ② The above information and configuration are based on left side counterweight layout.
 - ③ Configuration is without counterweight safety gear.

Hoistway and Machine Room

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- Building Structure
- Wall and Floor Finishes
- Beam



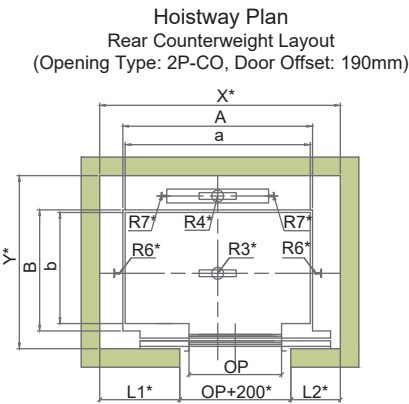
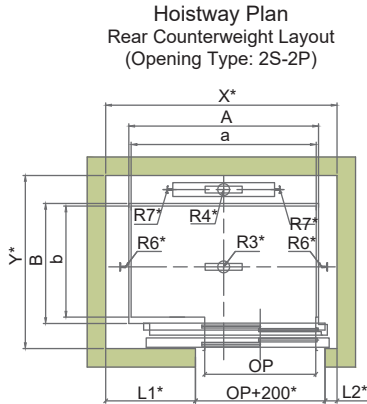
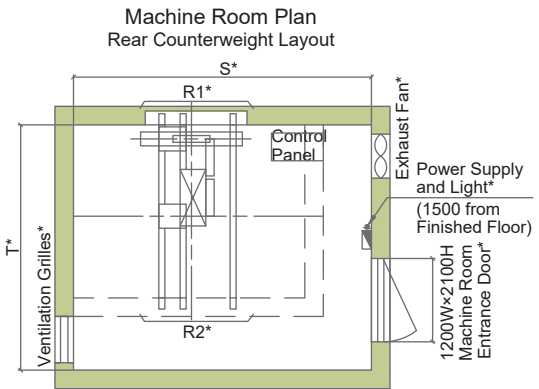
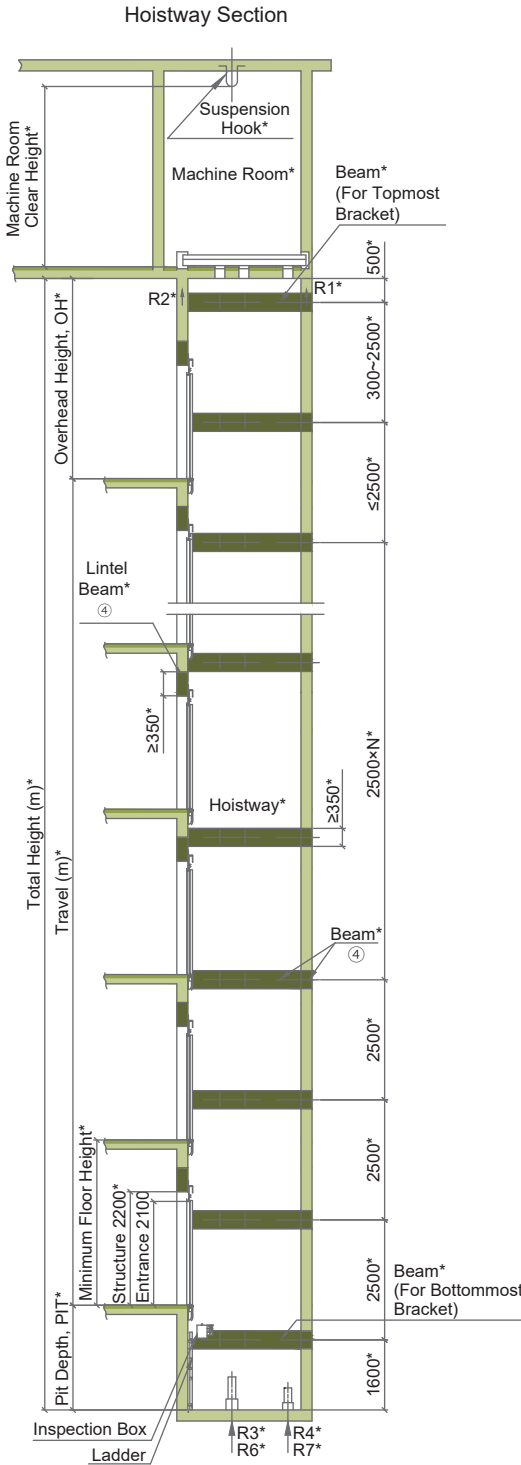
- Note:
- ① The above information is based on GB7588-2003 standards.
 - ② Items with "*" shall be furnished by building contractors.
 - ③ Unit of dimension shall be in mm unless otherwise stated.
 - ④ The hoistway construction shall be reinforced concrete ring beam with strength C25 or whole hoistway of reinforced concrete wall. If you have other situations, please contact us.
 - ⑤ For hoistway and machine room details, please contact us.
 - ⑥ The suspension hooks capacity shall be as follows:

Rated Load (kg)	Rated Speed (m/min)	Machine Room Clear Height (mm)	Suspension Hook Capacity (Tons)
1050	60/90/105	2100	3
1050	120/150	2450	4

Hoistway and Machine Room

The followings shall be furnished by building contractors:

- Building Structure
- Wall and Floor Finishes
- Beam



- Note:
- ① The above information is based on GB7588-2003 standards.
 - ② Items with "*" shall be furnished by building contractors.
 - ③ Unit of dimension shall be in mm unless otherwise stated.
 - ④ 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.
 - ⑤ For hoistway and machine room details, please contact us.
 - ⑥ The suspension hooks capacity shall be as follows:

Rated Load (kg)	Rated Speed (m/min)	Machine Room Clear Height (mm)	Suspension Hook Capacity (Tons)
1050	60/90/105	2100	3
1050	120/150	2450	4

Hoistway and Machine Room

Deep Car

Rated Load (kg)	Rated Speed (m/min)	Car Size (mm)		Door Opening (mm)		Front Wall Arrangement (mm)		Hoistway Size (mm)	Machine Room Size (mm)	Machine Room Reaction Force (KN)			Pit Reaction Force (KN)			
		Car Inside (a×b)	Car Outside (A×B)	Type	Width OP	L1	L2	X×Y	S×T	R1	R2	R5	R3	R4	R6	R7
1050	60	1100×2100	1150×2285	2P-CO	900	430	430	1960×2500	1960×2500	67.6	40.2	5.5	135	113	42	3
	90									70.4	42.1	5.5	145	123	50	5
	105					470	430	2000×2500	2000×2500	77	48	6	165	145	60	7
	120									78	55	7	195	165	65	7
1050	150	1300×1900	1350×2085	2P-CO	900	520	430	2050×2300	2050×2300	67.6	40.2	5.5	135	113	42	3
	60									70.4	42.1	5.5	145	123	50	5
	90					570	430	2100×2300	2100×2300	77	48	6	165	145	60	7
	105									78	55	7	195	165	65	7

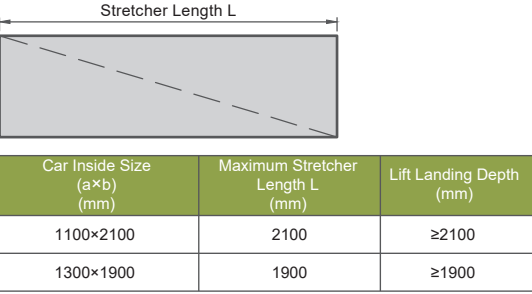
- Note:
- ① The above information is based on GB7588-2003 standards.
 - ② The above information and configuration are based on left side counterweight layout.
 - ③ Configuration is without counterweight safety gear.

Wide Car

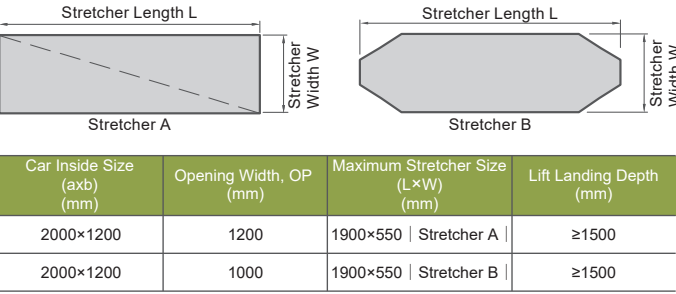
Rated Load (kg)	Rated Speed (m/min)	Car Size (mm)		Door Opening (mm)		Front Wall Arrangement (mm)		Hoistway Size (mm)	Machine Room Size (mm)	Machine Room Reaction Force (kN)		Pit Reaction Force (kN)			
		Car Inside (a×b)	Car Outside (A×B)	Type	Width OP	L1	L2	X×Y	S×T	R1	R2	R3	R4	R6	R7
1050	60	2000×1200	2050×1398	2S-2P	1200	980	120	2500×1850	2500×1850	66	40	135	113	42	3
	90									69.5	42	145	123	50	5
	105					970	130	2500×1870	2500×1870	76	50	165	150	60	7
	120									89	60	180	175	66	7
	150														
1050	60	2000×1200	2050×1385	2P-CO (Door Offset)	1000	805	495	2500×1800	2500×1800	66	40	135	113	42	3
	90									69.5	42	145	123	50	5
	105									89	60	180	175	66	7
	120									89	60	180	175	66	7
	150														

- Note:
- ① The above information is based on GB7588-2003 standards.
 - ② The above information and configuration are based on rear counterweight layout.
 - ③ Configuration is without counterweight safety gear.
 - ④ For wide car with 2P-CO door opening type, it is based on 190mm door offset configuration.

Maximum Allowable Stretcher Size (Deep Car):



Maximum Allowable Stretcher Size (Wide Car):



Overhead Height and Pit Depth

Rated Load (kg)	Rated Speed (m/min)	Overhead Height, OH (mm)	Pit Depth, PIT (mm)
450	60	4550	1450
	90	4700	1450
	105	4750	1500
630	60	4350	1450
	90	4450	1450
	105	4550	1500
825	60	4350	1450
	90	4450	1450
	105	4550	1500
	120	4550	1600
	150	4900	1900
900	60	4350	1450
	90	4450	1450
	105	4550	1500
	120	4550	1600
	150	4900	1900
1050	60	4350	1450
	90	4450	1450
	105	4550	1500
	120	4550	1600
	150	4900	1900
1050 (Deep Car)	60	4350	1450
	90	4450	1450
	105	4550	1500
	120	4700	1600
	150	4900	1900
1050 (Wide Car)	60	4350	1450
	90	4450	1450
	105	4550	1500
	120	4550	1600
	150	4900	1900

Rated Load (kg)	Rated Speed (m/min)	Overhead Height, OH (mm)			Pit Depth, PIT (mm)			
		Rear Counterweight	Side Counterweight		Rear Counterweight		Side Counterweight	
			Travel ≤ 70m	Travel > 70m	Travel ≤ 70m	Travel > 70m	Travel ≤ 70m	Travel > 70m
1150	60	4350			1450	—	1450	—
	90	4450			1450			
	105	4600			1550	1600	1550	
	120	4650			1600	1650	1600	
	150	5100			1900			
1200	60	4350	4350	—	1450	—	1450	—
	90	4450			1450			
	105	4600			1550	1600	1550	
	120	4650			1600	1650	1600	
	150	5100			1900			
1350	60	4700	4700	—	1450	—	1450	—
	90	4650	4650	4700	1450		1450	1500
	105	4800	4800	4850	1550	1600	1550	1600
	120	4850	4900		1600	1650	1650	
	150	5100			1900			
1600	60	4700	4700	—	1450	—	1450	—
	90	4650	4650	4700	1450		1450	1500
	105	4800	4800	4850	1550	1600	1550	1600
	120	4850	4900		1600	1650	1650	
	150	5100			1900			

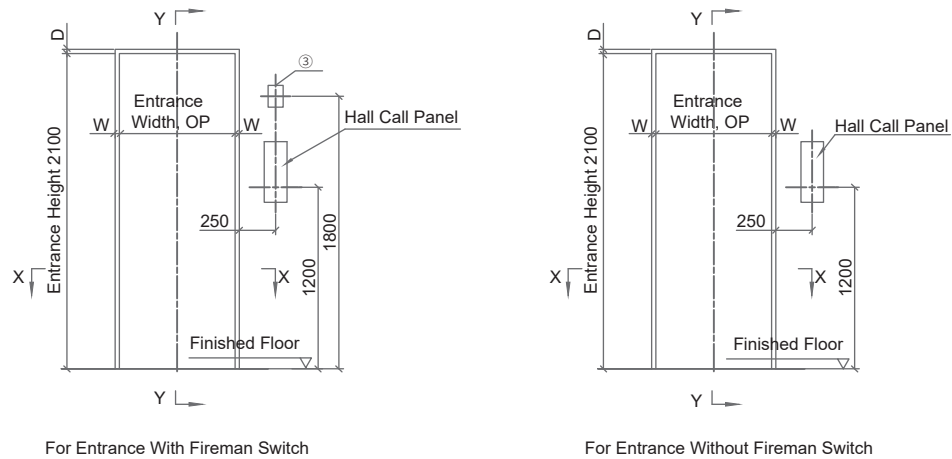
- Note:
- ① The above information is based on GB7588-2003 standards.
 - ② The overhead height, OH is based on bare ceiling height of 2350mm.
 - ③ The pit depth, PIT is based on vinyl tile finish without recess.
 - ④ Configuration is without counterweight safety gear.
 - ⑤ Configuration is based on the following decoration weight provision:
For rated load 1050kg with rated speed 150m/min, decoration weight provision is up to 200kg.
For other configuration, decoration weight provision is up to 300kg.

Entrance Design

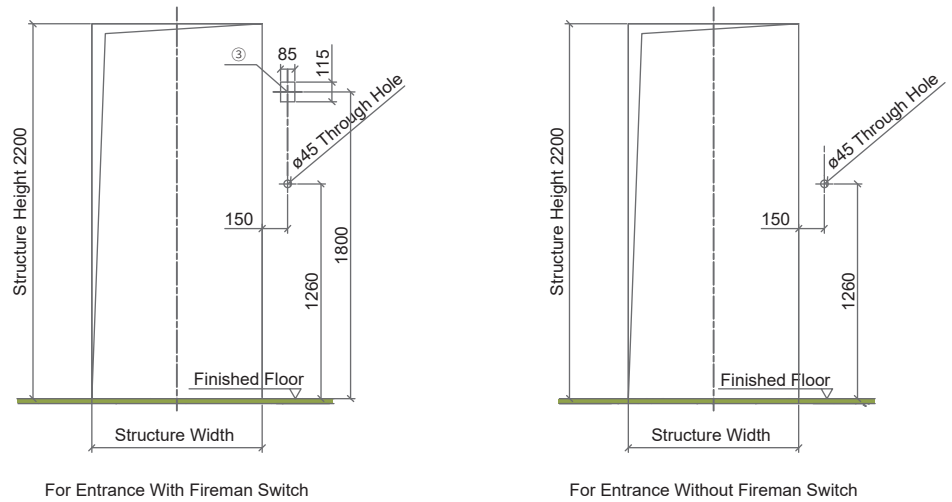
The followings shall be furnished by building contractors:

- Wall and Floor Finishes

Elevation of Entrance



Structure Opening of Entrance



Type	AS-1X
W	10
D	10

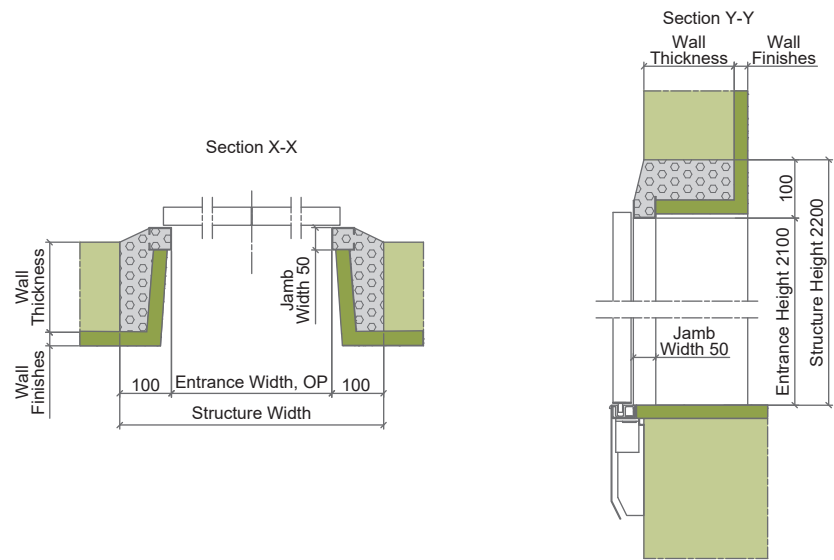
- Note:
- ① The above information is based on GB7588-2003 standards.
 - ② Unit of dimension shall be in mm unless otherwise stated.
 - ③ Applicable only when fireman operation with switch is located at lift landing.
 - ④ Structure opening of entrance shall be furnished by building contractor.

Entrance Design

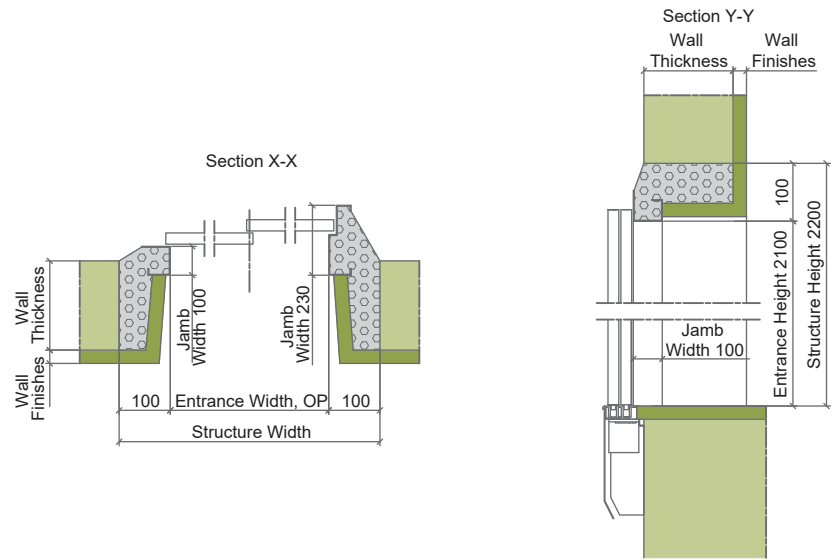
The followings shall be furnished by building contractors:

- Building Structure
- Wall and Floor Finishes
- Grouting Work

Narrow Jamb (AS-1X) For 2 Panels Center Opening (2P-CO)



Narrow Jamb (AS-1X) For Side Opening (2S-2P)



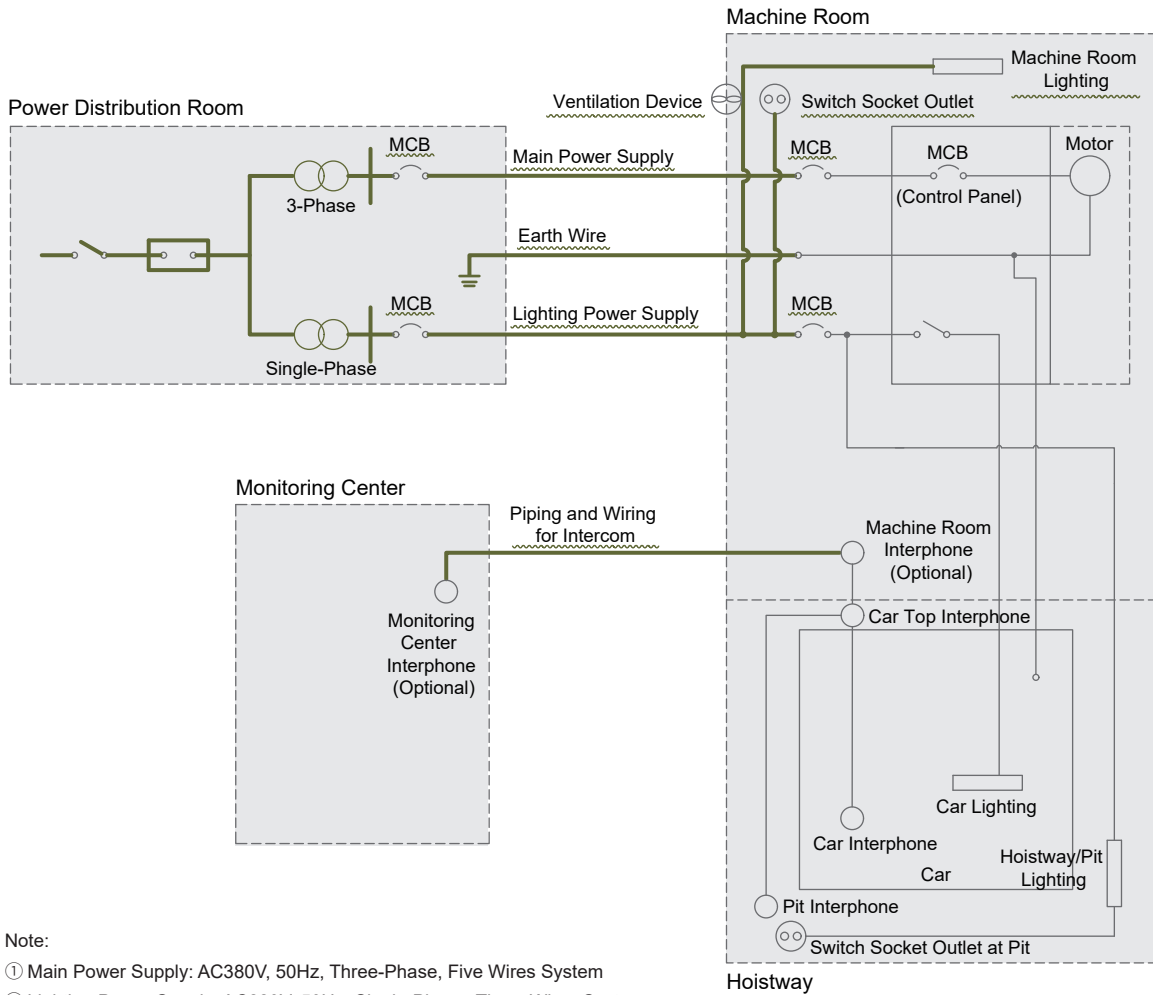
- Note:
- ① Unit of dimension shall be in mm unless otherwise stated.

Electrical Information

The following shall be furnished by building contractors:

~~~~~ Electrical Equipment

———— Cable



- Note:
- ① Main Power Supply: AC380V, 50Hz, Three-Phase, Five Wires System
  - ② Lighting Power Supply: AC220V, 50Hz, Single-Phase, Three Wires System

| Item                                           | Works to be provided by building contractor                                                                                                                   |
|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Main Power Supply                              | To provide power supply switch around the entrance of machine room. To install facilities to ensure the power supply voltage fluctuation shall be within ±7%. |
| Lighting Power Supply                          | To provide lighting power supply for car lighting, fan and indicator.                                                                                         |
| Ventilation Device                             | To provide mechanical ventilation to the machine room to ensure that the temperature in the machine room is maintained at below 40°C.                         |
| Machine Room Lighting and Switch Socket Outlet | To provide single phase AC220V, 10A switch socket outlet and machine room lighting with switch around the entrance of machine room for maintenance purposes.  |

Electrical Data

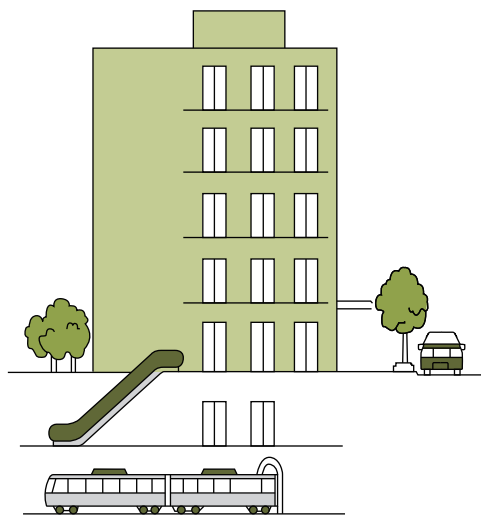
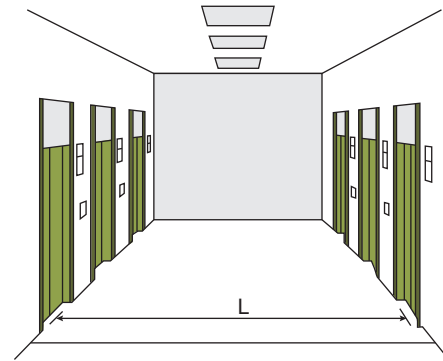
| No. | Rated Load (kg) | Rated Speed (m/min) | Supply Voltage           | Circuit Breaker Capacity (A) |         | Transformer Capacity (KVA) |         | Main Power Wire Size (mm <sup>2</sup> ) |         | Earth Wire Size (mm <sup>2</sup> ) |         |
|-----|-----------------|---------------------|--------------------------|------------------------------|---------|----------------------------|---------|-----------------------------------------|---------|------------------------------------|---------|
|     |                 |                     |                          | 1 unit                       | 2 units | 1 unit                     | 2 units | 1 unit                                  | 2 units | 1 unit                             | 2 units |
| 1   | 450             | 60                  | 3Φ380V<br>1Φ220V<br>50Hz | 40                           | 40      | 8                          | 13      | 6                                       | 8       | 6                                  | 8       |
|     |                 | 90                  |                          | 40                           | 50      | 9                          | 15      | 6                                       | 10      | 6                                  | 10      |
|     |                 | 105                 |                          | 40                           | 50      | 10                         | 16      | 8                                       | 10      | 8                                  | 10      |
| 2   | 630             | 60                  |                          | 40                           | 50      | 9                          | 15      | 6                                       | 8       | 6                                  | 8       |
|     |                 | 90                  |                          | 40                           | 50      | 11                         | 18      | 8                                       | 10      | 8                                  | 10      |
|     |                 | 105                 |                          | 40                           | 63      | 12                         | 19      | 8                                       | 16      | 8                                  | 16      |
| 3   | 825             | 60                  |                          | 40                           | 50      | 10                         | 16      | 6                                       | 10      | 6                                  | 10      |
|     |                 | 90                  |                          | 40                           | 63      | 12                         | 20      | 8                                       | 16      | 8                                  | 16      |
|     |                 | 105                 |                          | 40                           | 63      | 13                         | 22      | 8                                       | 16      | 8                                  | 16      |
|     |                 | 120                 |                          | 50                           | 80      | 14                         | 24      | 10                                      | 25      | 10                                 | 16      |
|     |                 | 150                 |                          | 50                           | 80      | 16                         | 27      | 16                                      | 30      | 16                                 | 16      |
| 4   | 900             | 60                  |                          | 40                           | 50      | 10                         | 17      | 6                                       | 10      | 6                                  | 10      |
|     |                 | 90                  |                          | 40                           | 63      | 13                         | 21      | 8                                       | 16      | 8                                  | 16      |
|     |                 | 105                 |                          | 40                           | 80      | 14                         | 23      | 10                                      | 25      | 10                                 | 16      |
|     |                 | 120                 |                          | 50                           | 80      | 15                         | 25      | 10                                      | 25      | 10                                 | 16      |
|     |                 | 150                 |                          | 63                           | 100     | 17                         | 29      | 16                                      | 30      | 16                                 | 16      |
| 5   | 1050            | 60                  |                          | 40                           | 63      | 11                         | 18      | 6                                       | 10      | 6                                  | 10      |
|     |                 | 90                  |                          | 40                           | 80      | 14                         | 23      | 8                                       | 16      | 8                                  | 16      |
|     |                 | 105                 |                          | 50                           | 80      | 15                         | 26      | 10                                      | 25      | 10                                 | 16      |
|     |                 | 120                 |                          | 50                           | 80      | 17                         | 28      | 16                                      | 25      | 16                                 | 16      |
|     |                 | 150                 |                          | 63                           | 100     | 20                         | 33      | 25                                      | 30      | 16                                 | 16      |
| 6   | 1150            | 60                  |                          | 40                           | 63      | 12                         | 19      | 8                                       | 10      | 8                                  | 10      |
|     |                 | 90                  |                          | 50                           | 80      | 15                         | 25      | 10                                      | 25      | 10                                 | 16      |
|     |                 | 105                 |                          | 50                           | 80      | 16                         | 27      | 10                                      | 25      | 10                                 | 16      |
|     |                 | 120                 |                          | 63                           | 100     | 18                         | 30      | 16                                      | 25      | 16                                 | 16      |
|     |                 | 150                 |                          | 63                           | 125     | 21                         | 36      | 25                                      | 30      | 16                                 | 16      |
| 7   | 1200            | 60                  |                          | 40                           | 63      | 12                         | 20      | 8                                       | 10      | 8                                  | 10      |
|     |                 | 90                  |                          | 50                           | 80      | 15                         | 25      | 10                                      | 25      | 10                                 | 16      |
|     |                 | 105                 |                          | 50                           | 100     | 17                         | 28      | 10                                      | 25      | 10                                 | 16      |
|     |                 | 120                 |                          | 63                           | 100     | 19                         | 31      | 16                                      | 25      | 16                                 | 16      |
|     |                 | 150                 |                          | 80                           | 125     | 22                         | 37      | 25                                      | 30      | 16                                 | 16      |
| 8   | 1350            | 60                  |                          | 40                           | 63      | 12                         | 21      | 8                                       | 16      | 8                                  | 16      |
|     |                 | 90                  |                          | 50                           | 80      | 16                         | 27      | 10                                      | 25      | 10                                 | 16      |
|     |                 | 105                 |                          | 63                           | 100     | 18                         | 30      | 16                                      | 25      | 16                                 | 16      |
|     |                 | 120                 |                          | 63                           | 100     | 20                         | 33      | 16                                      | 30      | 16                                 | 16      |
|     |                 | 150                 |                          | 80                           | 125     | 24                         | 40      | 25                                      | 30      | 16                                 | 16      |
| 9   | 1600            | 60                  |                          | 40                           | 80      | 14                         | 23      | 8                                       | 16      | 8                                  | 16      |
|     |                 | 90                  |                          | 63                           | 100     | 18                         | 31      | 16                                      | 25      | 16                                 | 16      |
|     |                 | 105                 |                          | 63                           | 100     | 20                         | 34      | 16                                      | 30      | 16                                 | 16      |
|     |                 | 120                 |                          | 80                           | 125     | 23                         | 38      | 16                                      | 30      | 16                                 | 16      |
|     |                 | 150                 |                          | 80                           | 160     | 27                         | 45      | 25                                      | 35      | 16                                 | 16      |

- Note:
- ① The above information is based on GB7588-2003 standards.
  - ② The above information on the Supply Voltage, Circuit Breaker Capacity (A), Transformer Capacity (KVA), Main Power Wire Size (mm<sup>2</sup>) and Earth Wire Size (mm<sup>2</sup>) are the requirements at building side.
  - ③ The main power wire size specified above is applicable for wire length less than 150m. For main power wire length more than 150m, please calculate using the following formula:  
Main power wire size (mm<sup>2</sup>) = [Actual wire length / 150] x [Wire size in above table].
  - ④ The calorific value (kcal/hr) for one elevator is calculated using the following formula:  
Calorific Value (kcal/hr) = Rated Load (kg) x Rated Speed (m/min) x [1/45].



- Maximum in-line arrangement is 4 elevators.
- Elevators not in the same groups should not be set in the same line.
- Avoid placing the elevators entrance near pillars.

- Elevators in the same group with face-to-face arrangement, the distance of facing elevators (L) should be 3.5~4.5m.
- Elevators not in the same group with face-to-face arrangement, the distance of facing elevators (L) should be more than 6m.



- Elevators in the same group is recommended to have the same service floors.
- Elevators in the same group is recommended to have one base floor instead of having multiple access floors.

## Working environment of the elevator shall be as follow:

1. Machine room 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 and corrosive hazard, anti-insulation and conductive particles atmosphere.

## About hoistway and machine room:

1. Hoistway and machine room shall not be used for purposes other than those connected with the elevators.
2. Hoistway walls (including reinforced concrete ring beams) should be vertical, and the allowable deviation for the hoistway verticality is 0 ~ +30mm.
3. Hoistway and machine room walls, floors and roofs should be able to absorb a large amount of elevator operation noise.
4. Hoistway and machine room 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.
5. Hoistway walls shall be 200mm concrete walls.
6. If elevator hoistway is steel structure construction, please contact us.
7. Elevator hoistway is preferably not located in the space above accessible area. If the actual situation cannot meet the regulations, please contact us.

## Work to be done by Building Contractors:

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.

1. Prepare hoistway with proper framing and enclosure, suitable pit of proper depth with drains and waterproofing if required, properly lighted and ventilated machine room of adequate size with concrete floor, access door, ladder and guards as required.
2. Provide and/or cut all necessary holes, chases, and openings and finish after equipment installation.
3. Supply and secure all supports, reinforced concrete slabs, etc., necessary for installation of the machinery, doors, buffers, etc.
4. Furnish all necessary cement and/or concrete for grouting-in of brackets, bolts, machine beams etc.
5. Suspension hook in the machine room with required loading as shown in this catalogue.
6. Furnish main for three-phase electric power and single-phase lighting supply to machine room, following the instructions of the elevator contractors on outlet position and wire size.
7. Supply electric power for lighting of work area, installation work, elevator testing and spray painting.
8. Provide, free of charge, a suitable theft-proof storage area for materials and tools during erection work.
9. Prepare and erect suitable scaffolding and protective measures for the works in progress.