



ISO 9001
Certificate



ISO 14001
Certificate



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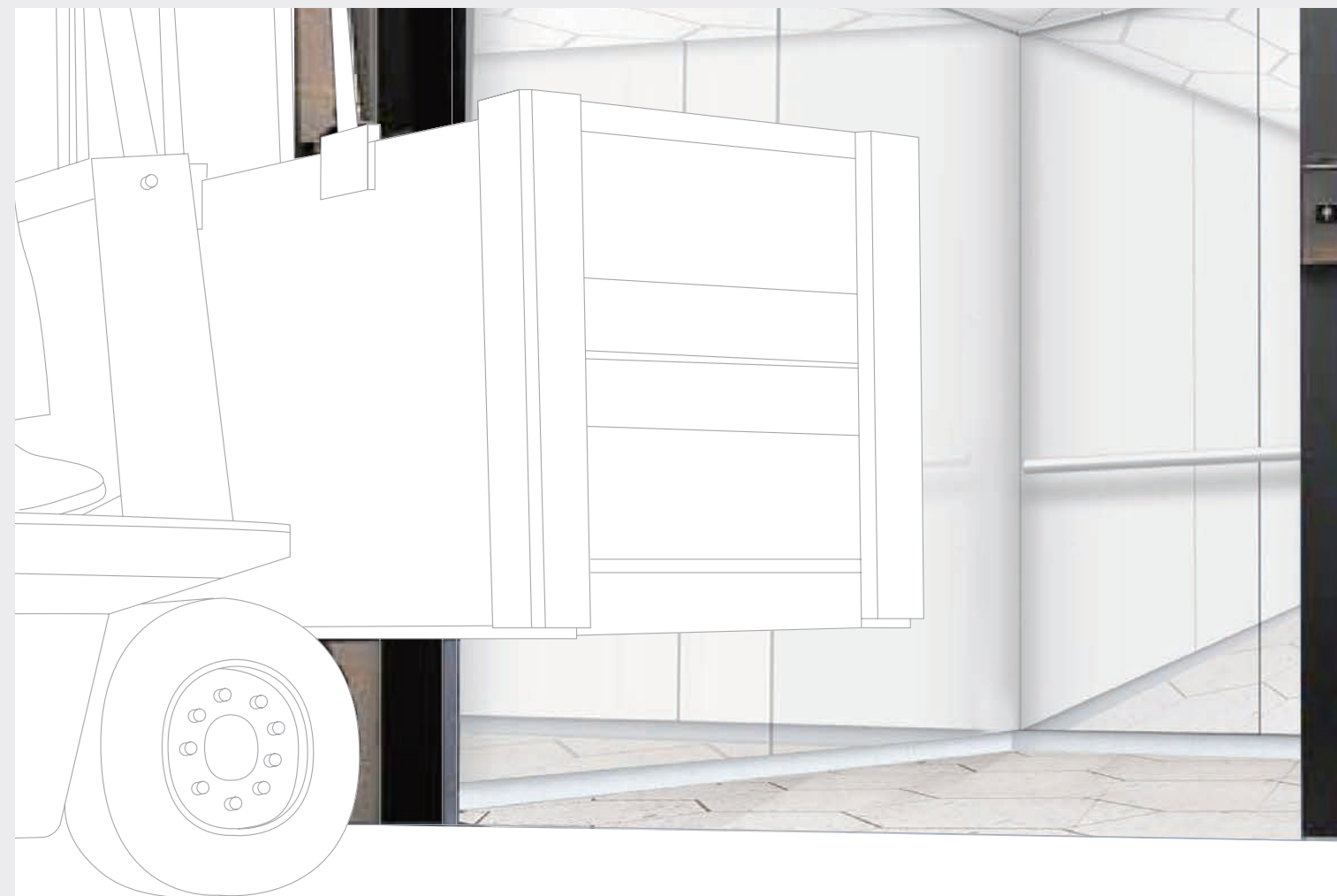
Distributor's office:



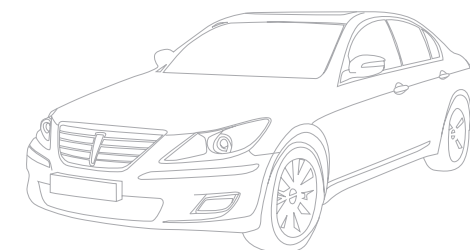
SIGMA

Reaching new heights
www.sigmaelevators.com

Sigma constantly endeavors to improve products. Please note that the information in this catalog is subject to change without prior notice.
2021.7 printed in Korea / Revision 2



Freight & Car Elevator



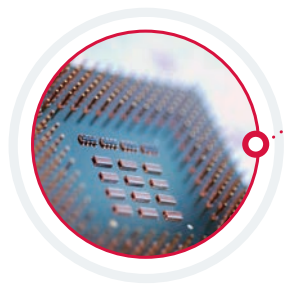
Your Elevator Partner... SIGMA



SIGMA

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SIGMA Reaching new heights



Engineered to be Safe & Reliable

Sigma products are engineered by highly qualified engineers thereby ensuring customers receive excellent products with reliable quality.



Aesthetics Design Excellence

Sigma's international design centers are staffed with professionals who continue to pursue ideal aesthetic designs to satisfy customers needs.

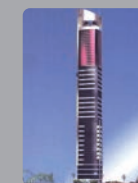
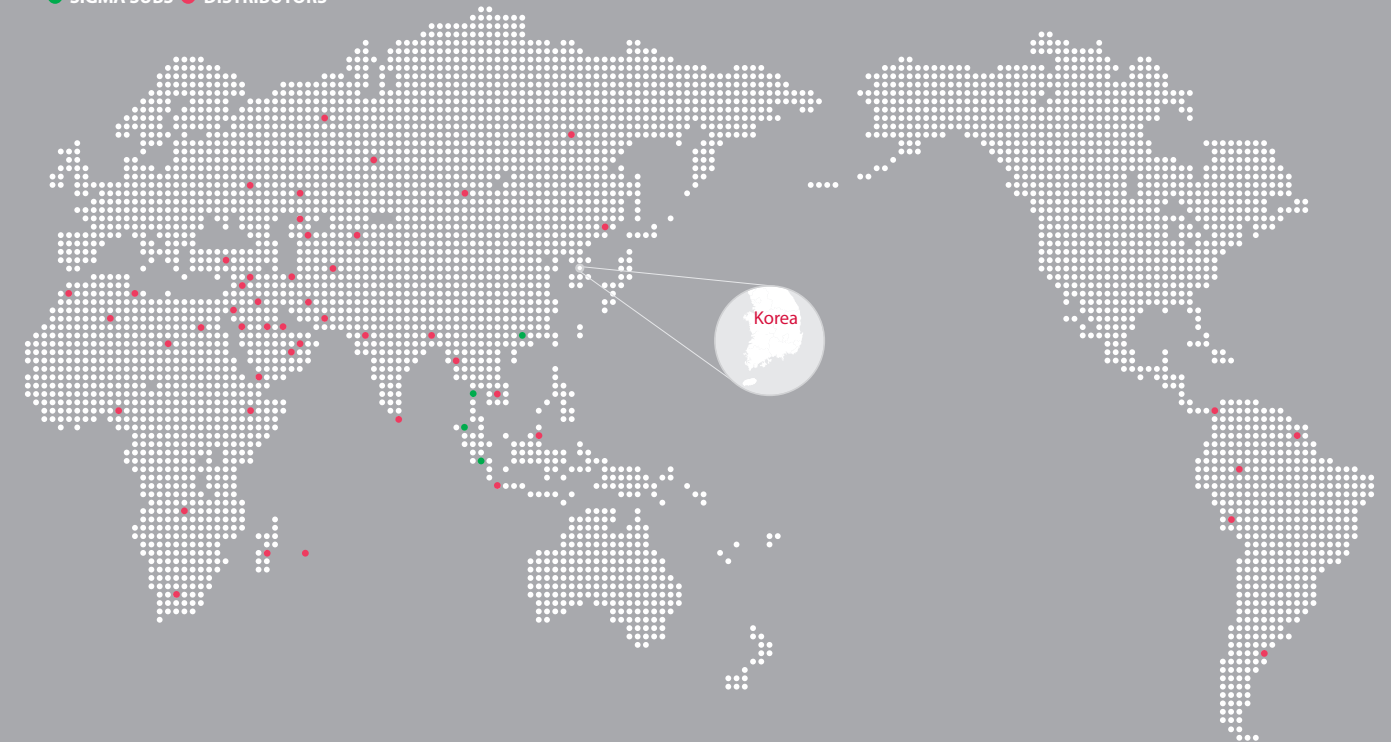


Global Network

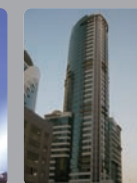
Sigma has served customers in more than 60 countries over the last 40 years.

Sigma has installed over 160,000 elevators worldwide since 1978

● SIGMA SUBS ● DISTRIBUTORS



Khalid Al Attar Tower
U.A.E



Al Rames Tower
Qatar



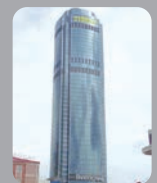
Darwaza Tower
Kuwait



Vorobiev Gory
Russia



Triumph Palace
Russia



Antei
Russia



Sheraton Hotel
Puerto Rico



Baiyoke Tower
Thailand



Grand Hyatt Hotel
Indonesia



Emerald Tower
Kazakhstan



LG Beijing Tower
China



Juma Al Majid
Tower
U.A.E



Armada Tower
U.A.E



Rostonskaya
Russia



Shangri La Hotel
Mongolia



Plaza La
Castellana
Venezuela



Torre
Global
Bank
Panama



Ocean
Two
Panama



Bassura Residence
Indonesia



SIGMA Freight & Car elevator

Freight Elevator

Our dedication and passion to reach customer satisfaction always have been a driving force of our creative and innovative ideas.

As your Elevator Partner, upgrading our ideas in providing elevators that fit our customers needs and devoting ourselves in protecting environment are our ultimate goal.



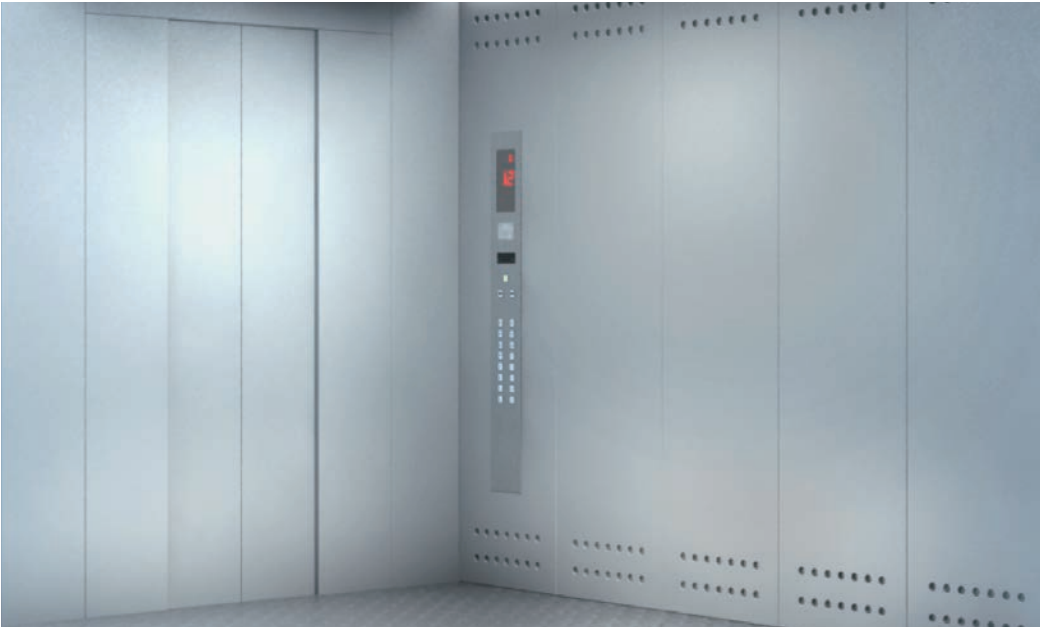
Optional Display



Configuration	
Wall	2130 Painted steel (Color : W1001)
Door	Painted Steel (Color : W1001)
Ceiling	B4090
Car Floor Type	4901AM (Steel Plate)
Optional Floor	4901PVC

COP	
Standard COP	COP1
Optional COP	COP2
Faceplate	Hairline stainless steel
Optional Faceplate	Mirror stainless steel/Ti-Mirror stainless steel
Standard Interface	Segment LED
Optional Interface	7\"TFT-LCD/6.4\"STN-LCD
Standard Button	BS34C

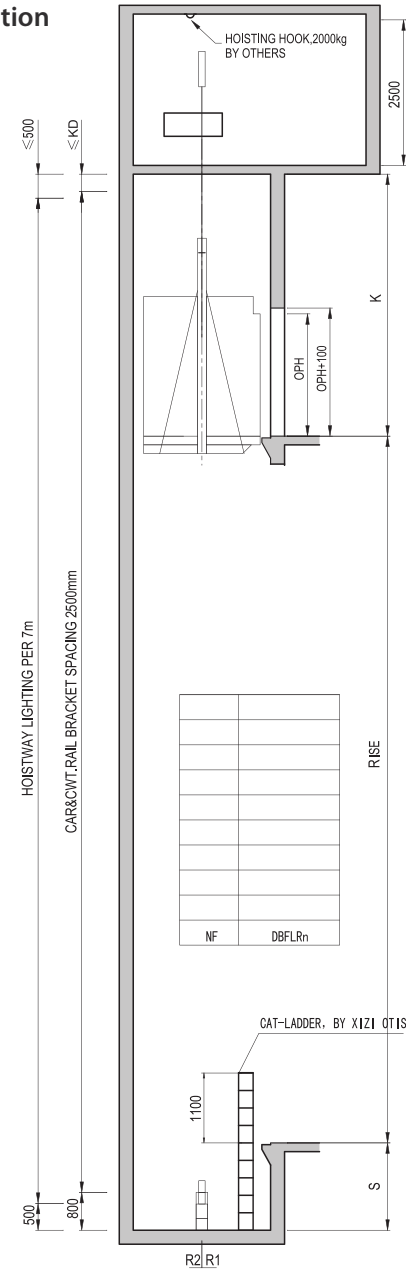
HBP	
Standard HBP	HBP2
Optional HBP	HBP11-STN/HBP11-TFT/HBP11-B
Standard Interface	Segment LED
Optional Interface	4.3\"TFT-LCD/4.3\"STN-LCD
Standard Button	BS34C



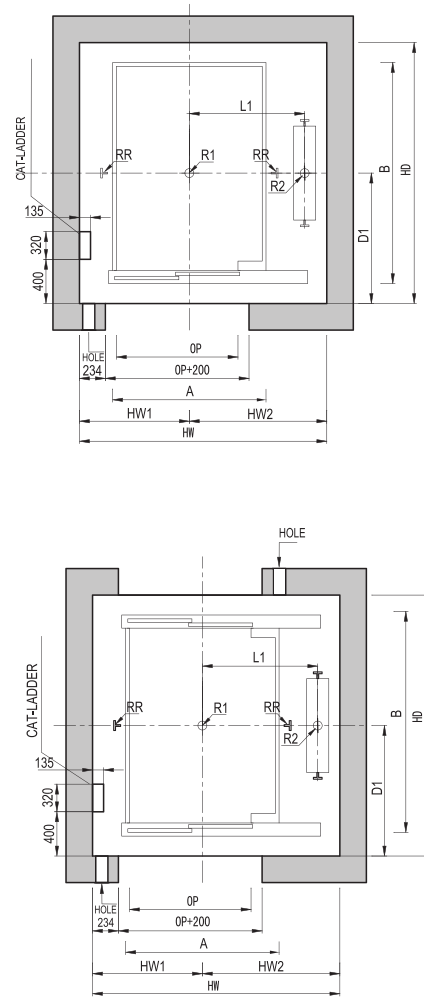
NOTE When car panel is 2130, the default finish of COP faceplate is in the same as car panel's finish.

Layout Duty Load ≤1000kg

Elevation



Hoist way plan

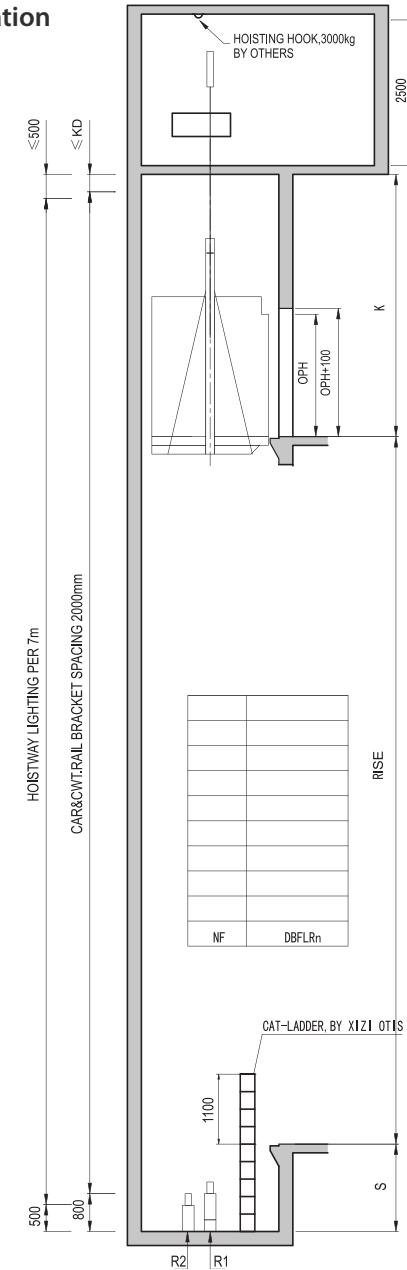


K	KD	Load (kg)	Entrance	RR(KN)	PITR(KN)		Machine Room Recation(KN)	
				RR	R1	R2	R3	R4
K≤6700	300	630	Single	25.5	74	49	65	50
			Two	28	84	54	70	55
K>6700	K-6700 +300	1000	Single	30	92	66	75	56
			Two	33	103	71	81	61

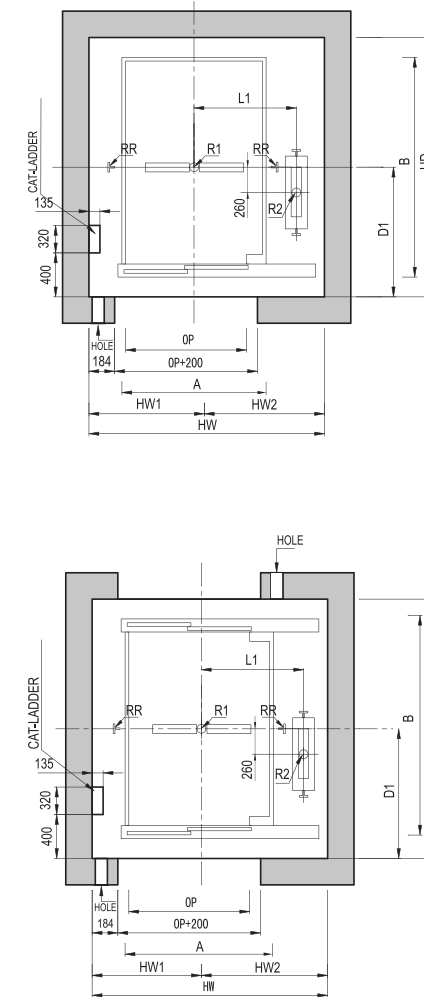
Load (kg)	Speed (m/s)	Car Outside(mm) A x B	Net opening(mm) OP x OPH	Net hoistway size(mm) (HW) x (HD)	HW1 (mm)	HW2 (mm)	Machine room size(mm) MW x MD	S (mm)	K (mm)	Other Size(mm)				Max. Floors	Max. Rise (m)
										D1	L1	L2	L3		
630	0.63	1200x1500	1100x2100	2150x1860	885	1265	2800x3500	1500	4450	900	975	701	224	8	30
	1.0												240	16	50
1000	0.63	1500x1800	1100x21000	2350x2160	1050	1300	3000x3800	1500	4450	1050	1100	826	224	8	30
	1.0												240	16	50

Layout Duty Load ≤2000kg

Elevation



Hoist way plan

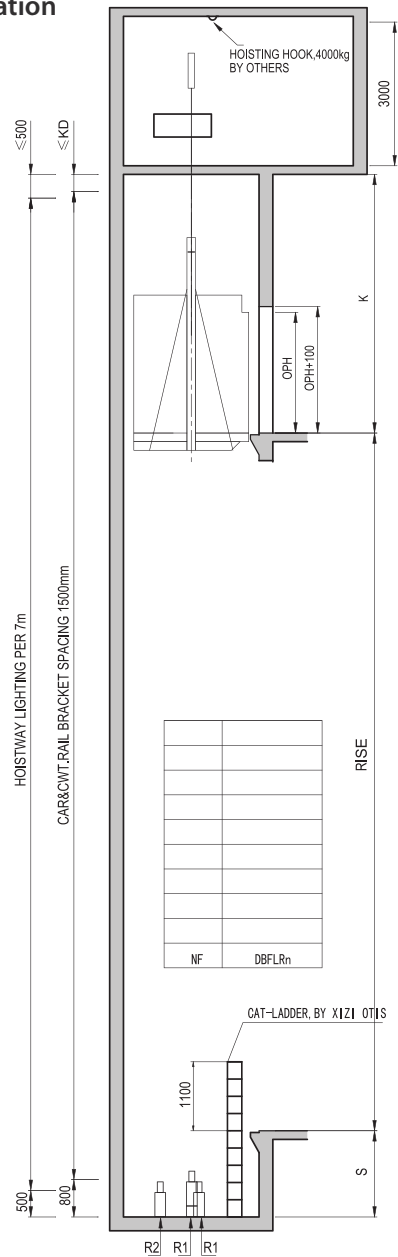


Entrance	RR(KN)	PITR(KN)		Machine Room Recation(KN)		
	RR	R1	R2	R3	R4	R5
Single	46	155	117	120	70	10
Two	50	169	124	130	75	10

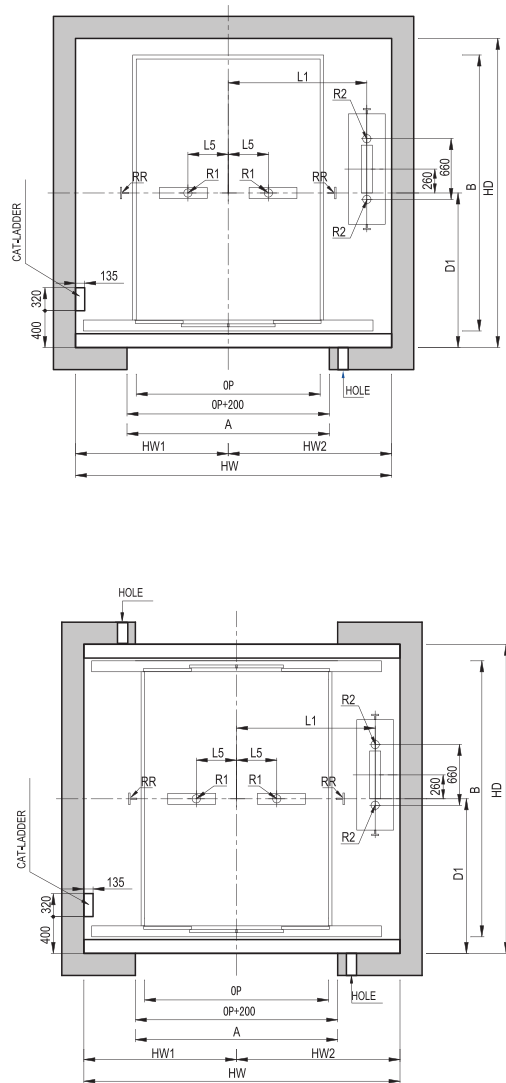
Load (kg)	Speed (m/s)	Car Outside(mm) A x B	Net opening(mm) OP x OPH	Net hoistway size(mm) (HW) x (HD)	HW1 (mm)	HW2 (mm)	Machine room size(mm) MW x MD	S (mm)	K (mm)	Other Size(mm)					Max. Floors	Max. Rise (m)
										D1	L1	L2	L4	L5		
2000	0.5	1800x2500	1500x2100	2700x2860	1160	1540	2700x4500	1500	4450	1400	1250	976	720	224	8	30
2000	1.0															

Layout Duty Load ≤3000kg

Elevation



Hoist way plan

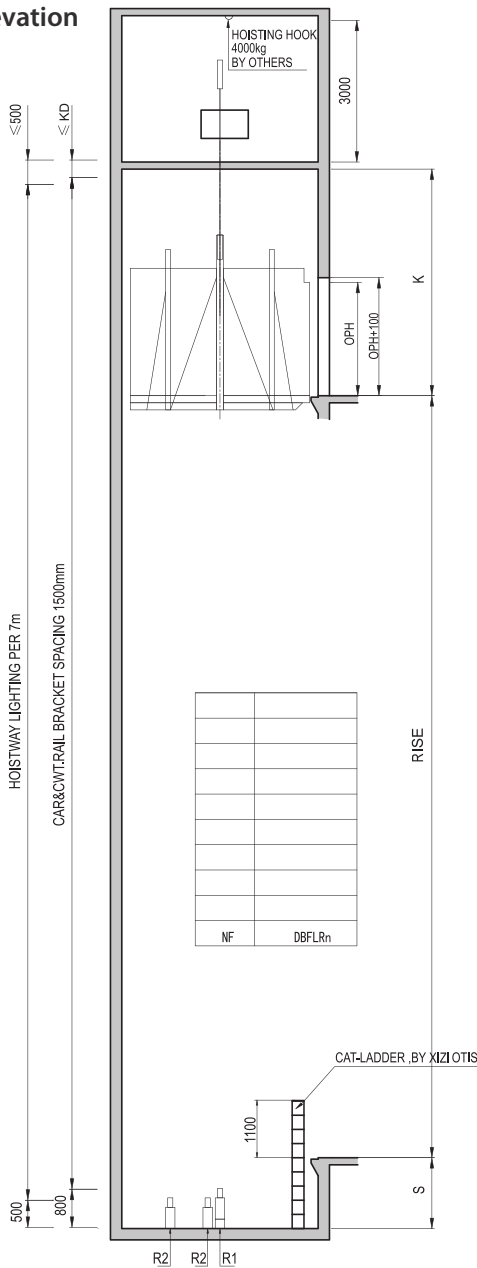


K	KD	Entrance	RR(KN)	PITR(KN)			Machine Room Recation(KN)		
			RR	R1	R2	R3	R4	R5	
K≤6700	300	Single	108	132	191	201	102	12	
K>6700	K-6700+300	Two	115	142	201	217	110	10	

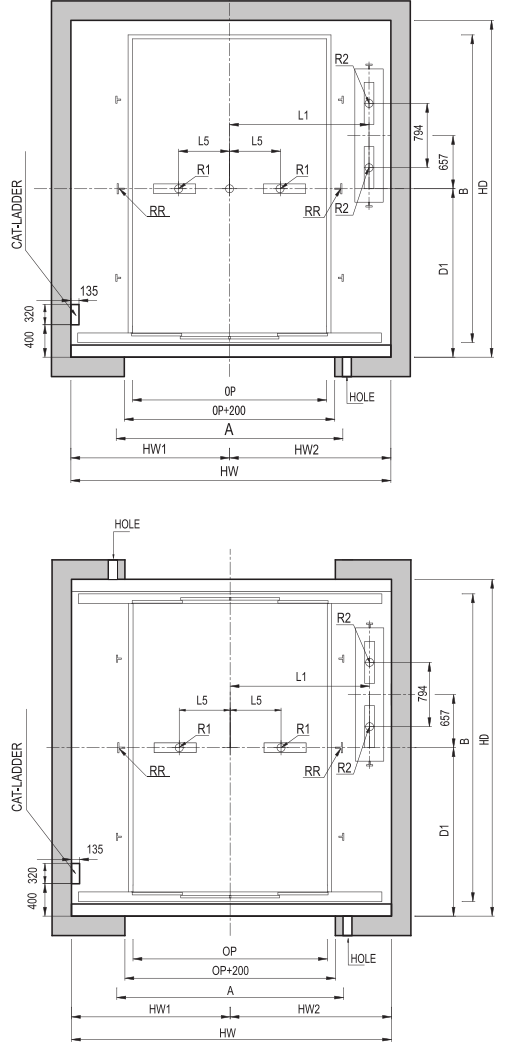
Load (kg)	Speed (m/s)	Car Outside (mm) A x B	Net opening (mm) OP x OPH	Net hoistway size (mm) (HW) x (HD)	HW1 (mm)	HW2 (mm)	Machine room size (mm) MW x MD	S (mm)	K (mm)	Other Size (mm)						Max. Floors	Max. Rise (m)
3000	0.5	2100x3000	2000x2400	3450x3360	1630	1820	3450x4000	1500	4800	D1	L1	L2	L3	L4	L5	8	30

Layout Duty Load ≤4000/5000kg

Elevation



Hoist way plan



K	KD	Entrance	RR(KN)	PITR(KN)			Machine Room Recation(KN)		
			RR	R1	R2	R3	R4	R5	
K≤6700	300	Single	136	171	124	221	125	50	
K>6700	K-6700+300	Two	144	181	130	235	135	55	
		Single	157	198	148	266	138	45	
		Two	166	210	154	283	146	49	

Load (kg)	Speed (m/s)	Car Outside (mm) A x B	Net opening (mm) OP x OPH	Net hoistway size (mm) (HW) x (HD)	HW1 (mm)	HW2 (mm)	Machine room size (mm) MW x MD	S (mm)	K (mm)	Other Size (mm)						Max. Floors	Max. Rise (m)
4000	0.25	2100x3800	2000x2400	3450x4160	1630	1820	3450x4160	1500	4800	D1	L1	L2	L3	L4	L5	8	16
	0.5															16	30
5000	0.25	2500x3800	2400x2400	3950x4160	1940	2010	3950x4160	1500	4800	D1	L1	L2	L3	L4	L5	8	16
	0.5															16	30

Technical Data

Operation Functions

Function	Name	Description (Standard)
EN-CK	Door hold cancel	Under automatic conditions, while the door is fully open, and in dealay closing stage, it can be closed in advance by pressing the EN-CK button constantly.
EN-CCO	Calls in opposite direction auto-clear	Calls in opposite direction can be cleared automatically while the car moves up and down.
DCP	Delayed car protection	If the door opened for a predetermined time due to constantly pressing the hall call button or other reasons, the elevator will be forced to close to respond other signals. And in case the elevator fails to carry out DCP force-closure, the elecator will stop and the inside or outside calls will be cancelled automatically. And the elevator will recover to normal operation till it detects the door is closed naturally.
DTO	Door Time Protection - Open	If the car door does not open comletely within an adjustable time (default 20s) after the door open command due to some mechanical problems or any other reasons, the elevator will cancel all the signals (including external and internal) and go to the floor nearby to release passengers.
DTC	Door Time Protection - Close	If there is no door closing signal, the elevator will automatically enter protection mode after the third door closing demand when it is blocked and exceeds the predetermined time limit due to some mechanial problems or any other reasons. It will resume normal operation only if the door closes successfully.
LNS	Load Non Stop	When a car is loaded to a predetermined percentage of its capacity, it is consedered 'full'. Additional passengers would be unable to enter.
PKS	Parking Operation	Park Stop function, when it's set to action on the park stop floor, the elevator will come back to the Park floor automatically afer responding calls registered before the PKS function. Then it will stay in energy saving mode, and cut off all lighting inside car and light hall call systematically.
PRK	Parking	That is stop ready switch, after the key which is intalled at the predetermined floor stats action elevator will move to the predetermined floor after finishing response to all commands At the same time, energy saving mode will start, cutting off all in car lighting and turning on all stop-lift switch indeicator.
LOBBY	Floor of Lobby	Lobby can be set according to various requirements. If no registration of calls or perations after preset timeout, the car will retrun to lobby and wait there. Lobby should be the floor with maximum passenger flow or the first floor.
EDP	Electron light curtain door protection	Light red unit for special purpose enhanced the safety of elecator, a infrared curtain can be formed in front of the car door, A quick response will be acted when something entered this carea.
TCI	Top of Car Inspection	The inspection operation switch and its push buttons and an emergency stopping device 'TES' shall be placed on the car roof that they are readily accessible.
ERO	Electrical Recall Operation	If there is an ERO device in the controller, ERO is available for emergency operation.
LWS	Overload protection	If the load exceeds the rate load, the sound signal will be given out by speaker, and 'OVER LOAD' will be displayed, the car door will not close, the elevator will not start.
DOB/DCB	Door Open/Close Button	The door open button in the car operating panel permits to open or re-open an automatic door, and to keep it open/close it by constant pressure.
DDT	Independent control of car door and landing door	Refer to the statistical information, the waiting time of door opening by hall call is longer than that by car commands. The system performance can be raised by adjusting the door hold time for both car door and landing door separately.
HDI/CDI	Hall/Car Direction Indicator	To inform the passengers about the operation direction, there should be a Direction indicator on car operational board or in the jamb of the car entrance.
HPI/CPI	Hall/Car Position Indicator	Persons both in car and at landings (generally main landing) may see, where the elevator(s) are.
ICU-3	Intercommunication Unit	The intercom system is primarily and emergency alarm device, which by definition is required to call for outside assistance if necessary. It shall be activated by the alarm button in the car operationing panel.
BELL	Alarm Bell	An alarm sound signal will be given out to the outside in specific conditions
OHT	Drive Overheat Protection	Self-protection mode will be achieved if the temp of the motor exceeds the preset value due to the heat made by motor itself or the high temp in the environment. The car stops at the nearest floor, unload and shut down the light and ventilation device; once the temp falls down to normal, the car will recover.
CCM	Passing Chime in car	On the top of the car, a bell ring will be given out when the car reaches the destination floor.
CBC	Cancel Error Calls	Before the car starts, the registration of a call or operation can be canceled by double click of this button. After the car starts, registration cancel will not allowed for the sake of passengers' safety.
RE-OP	Hall door re-open	This function allows the door to reopen while there is a call in the same direction of the car during door closing process.
RIN	Reinitiate	When the power recovered from a cut, position signals have not reserved or the position can not be detected, the car will move to lobby and reinitiate. After that the floor info can be displayed and the elevator backs to normal.
NTSD	End protection	If the speed is not slowed to the preset value while the car reach the end floor, a forced deceleration will be carried out by system in order to protect the safety of the car.
SE	Start Equalize	For better comfort at the car's start, computing the load in the car by system will make start equalization.
ELTU	Emergency Light	Emergency light in the car will start whenever there is a power cut.
DCBL/COBL	Door Close/Open Button Light	Door Close/Open Button will highlighted if the buttons are pressed as a success echo.

Function	Name	Description (Option)
ATT	Attendant Service Operation	The Attendant Operation feature allows semi-automatic operation with manual control.
DHB	Door Hold Button	Pressure on the Door Hold button 'DHB' in the car operating panel opens the door, reverses the door, and keeps the door open for a specified adjustable door hold time.
EFO	Emergency Fireman Operation	If there is a fire in a building, the system will cancel all commands, control the elevator back to the fireman's floor to evacuate the passenger and wait for the fireman's operation after receiving a fire alarm signal. The control system will send the signal to the fire center when the forced homing has been done successfully.
ISC	Independent Service	In order to satisfy and cater for the customers' special requirements, independent service state is set up to make the elevator operation & its gate opeation being controlled manually only.
SGS	Light eye and safety gear protection	Utilizing reliable leveling indicator plate and sensitive infrared, this double detection will ensure the passengers' safety.
EPO	Emergency Power Operation	In case that regular power supply shuts down, the power supply of cars turns to Emergency Power ,then cars in group run to defined landings (or next landings) one by one. After arrival to rescue position, the cars open doors and let passengers out. It's available to define a part of cars in group for normal service during EPO which is needed by some users. The return to full normal operation is done automatically when regular power supply is reestablished.
EQO	Earthquake Operation	Once an earthquake has happened, all the calls and operations will be cleared after the earthquake signal. T he car will stop at the nearest floor to unload passengers
G2C	Group control	This fuction is applied to the control of two interconnected elevators of the same model. This makes interconnected elevators can automatically give the most appropriate response, avoiding overlapped stopping of elevators, shortening the passengers' waiting time and raising the eefficiency.
ARED	MSD device	when a sudden power cut happens, the device will act and the car will stop at the lowest floor, and after the leveling action, a sound signal will be given out and the door opens meanwhile for unload. Levelling prcision : ±30mm.
NSB	Non stop button	Once the NSB button is pressed, all calls outside will not be registered, and the car moves directly toe the denstination floor.
FSL	Fireman's Service Indicator	Indicates that the car is on any kind of Fireman service.
REL	Re-leveling Operation	Stopping errors shall be corrected by re-leveling. The size of a possible stopping error depends on the type of drive and the accuracy of the position sensors.
SSM	Speech Synthesis Module	The speech synthesis option converts car position and direction information into an audible announcement aas the elevator arrives at a landing. As the landing is reached the floor name is announded for the benefit of elevator passengers who are visually impaired. As the doors open the hallway the committed car direction is also announded for the benefit of prospective passengers in the hall who are visually impaired as well as confirmation of direction for existing passengers.
EFS	Emergency fireman service (automated)	EFS-1 shall automatically place the car on independent service when the elevator is at the designated return landing from Phase I with the doors fully open.
BA	Building monitor ports	Elevators with BA function can provide scattered elevator status for computed managenet of the buildings. Contact type BA provides signals such as floor numbers, running directions, fault signals, park signals and saftey signals, and it can't display letters; RS485 type BA provides signals such as floor numbers, running directions, fault signals, park signals, emergency fire signals and door signals, it can also provied PKS control and EFK control, it can display letters except "S".



Car Elevator

With the development of elevator technology, elevators are no longer only for passengers. It can deliver cars to designated floors for parking which adds convenience to our daily life.

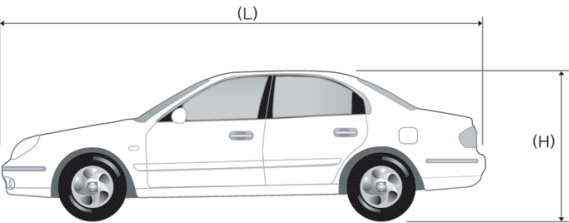
SIGMA Car Elevator

CDA-C01 | Elevator Design |



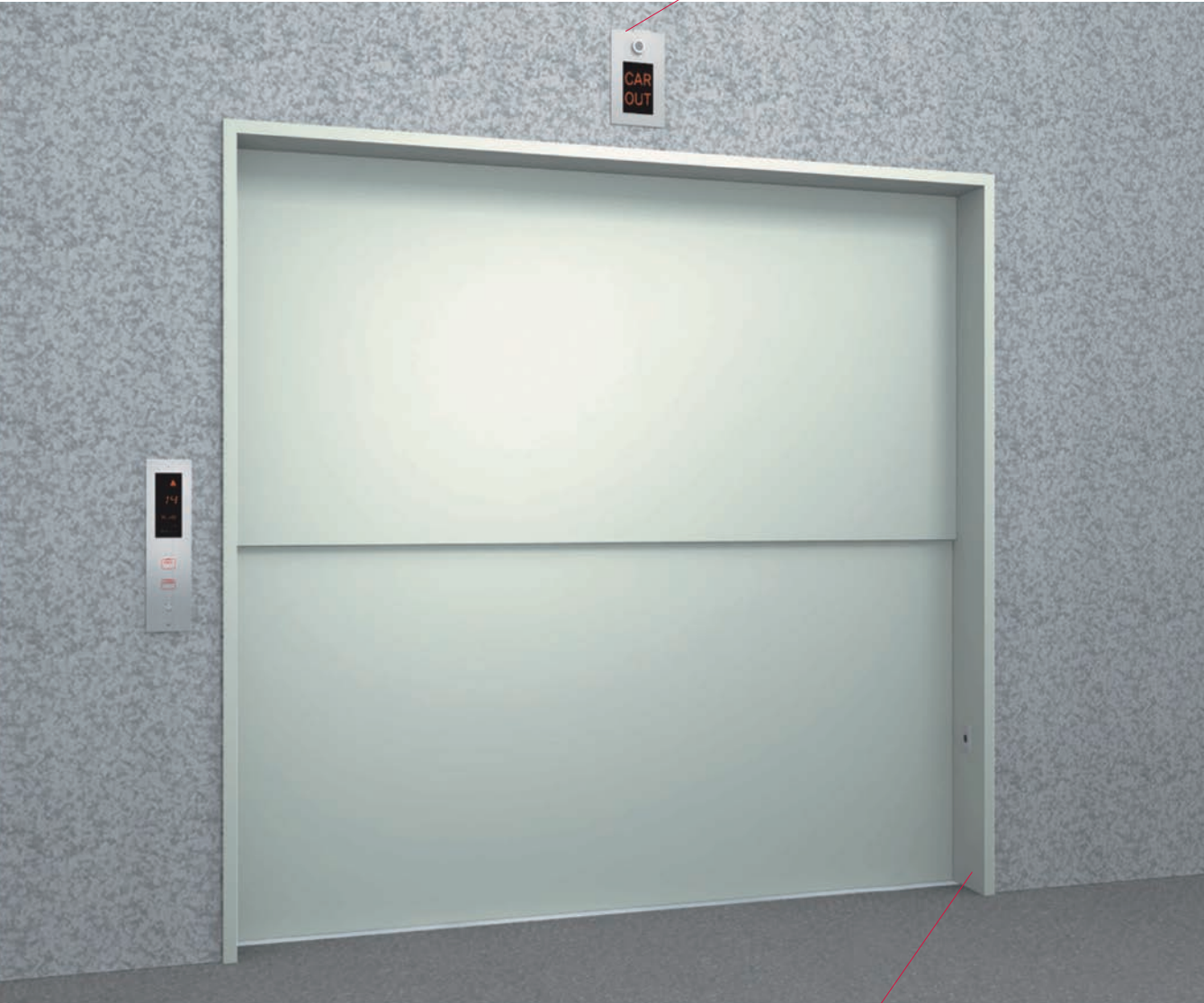
CDA-C01

Walls & Ceiling Design	C-CA1
Finish	SBC(Color No. LGP-943)
Car Door	None
COP	CBM-14C
CPI	Digital (included in COP)
Ventilation	Diffuser Fan
Flooring	Check Plate
Pfotocell Beam	Car Wall Both Sides
Car Stopping Bumps	Safety Angle



SIGMA Car Elevator

CDA-E01 | Elevator Design |



Car Status Indicator
When car moves indicator lights & bell ring

Photocell Beam

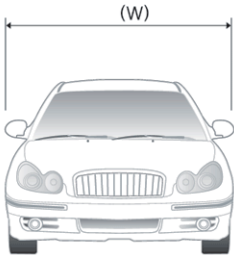
CDA-E01

Door Frame	SBC(Color No. LGP-943)
Landing Doors	SBC(Color No. LGP-943)
Flooring	Check Plate
HPI	VID-M432P
Car Status Indicator	Provided
Photocell Beam	Door Jamb Both Sides

Capacity and Allowed Dimensions

Capacity	Allowed maximum dimensions		
	(L)	(W)	(H)
2000kg	4800mm	1800mm	1700mm
2500kg	5200mm	2050mm	1700mm
3000kg	5200mm	2050mm	1700mm

Note. In case of SUV cargo vehicles, you may to contact SIGMA Elevator



Designs

Colors



COP



CBM-14C(MAIN)



CBM-14C(SUB)

Hall Indicator



VID-M432P

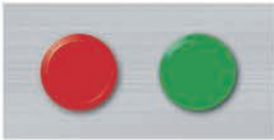


VID-M432

Status



Car Status Indicator



Hall Lantern

Technical Data

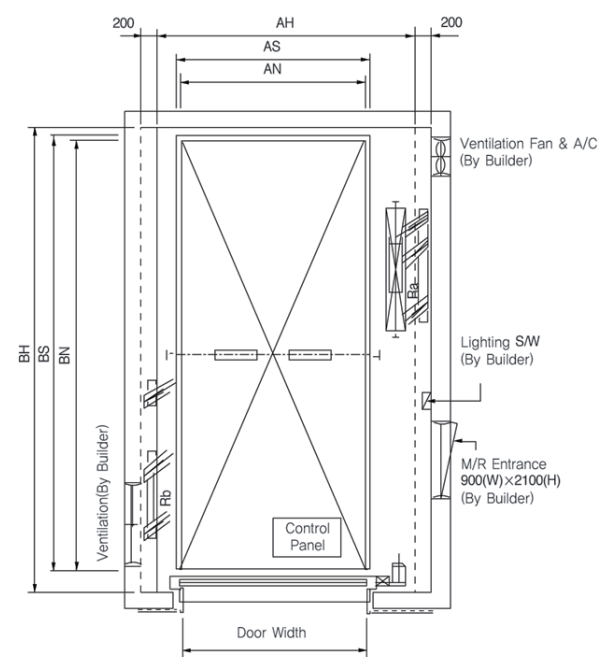
Technical Features

Section			2000kg						2500kg						3000kg				
			Rope type			Hydraulic			Rope type			Hydraulic			Rope type		Hydraulic		
Load (kg)			2000						2500						3000				
Speed (m/min)			30	45	60	20	30	30	45	60	20	30	30	45	20	30			
Motor Capacity (kw)			11	15	22	24	37	15	18.5	30	29	37	18.5	22	37	48			
Overhead (mm)			4200		4400		4200		4200		4400		4200		4200				
Pit Depth (mm)			1500						1500						1500				
Power 220v / 380v	Building NFB Capa (A)	1set	100/75	100/75	125/75	225/125	300/175	100/75	100/75	150/100	225/125	300/175	125/75	125/75	300/175	400/225			
		2sets	100/75	100/75	175/100	450/250	600/350	100/75	125/100	175/100	450/250	600/350	175/100	175/100	600/350	750/450			
	Building Transformer Capa (kVA)	1set	11	11	16	75	75	12	14	20	75	75	15	16	75	90			
		2sets	19	19	27	110	140	21	23	34	110	140	26	27	140	180			
	Service Wire Size (mm²)	1set	22/8	22/8	38/14	80/38	125/50	22/8	22/8	50/22	80/38	125/50	125/50	38/14	125/50	200/80			
		2sets	60/14	60/14	100/22	250/100	325/150	60/14	60/22	100/38	250/100	325/150	60/22	60/22	325/150	*/200			
	Grounding Contactor SIZE (mm²) 1/2		14/14			22/38		14/14			22/38		14/14		22/38		22/60		
	Car Insize AN×BN		Nomal		2350×5400						2500×6200						2500×6200		
Through Type																			
Hoistway Size AN×BN		Nomal	1set	3650×5800			3450×5800		3800×6600			3600×6600		3800×6600		3600×6600			
			2sets	7550×5800			7150×5800		7850×6600			7450×6600		7850×6600		7450×6600			
		Through Type	1set	3650×5850			3450×5850		3800×6650			3600×6650		3800×6650		3600×6650			
			2sets	7550×5850			7150×5850		7850×6650			7450×6650		7850×6650		7450×6650			
Machine Room Insize AN×BN		Nomal	1set	4050×5800			2500×2500		4200×6600			2500×2500		4200×6600		2500×2500			
			2sets	7950×5800			2500×5000		8250×6600			2500×5000		8250×6600		2500×5000			
		Through Type	1set	4050×5850			2500×2500		4200×6650			2500×2500		4200×6650		2500×5000			
			2sets	7950×5850			2500×5000		8250×6650			2500×5000		8250×6650		2500×5000			
Elevator Door Type		Car		No Car Door			No Car Door		No Car Door			No Car Door		No Car Door		No Car Door			
		Landing		2panel Upsliding						2panel Upsliding						2panel Upsliding			
Elevator Door Dimension		Width (EW)		2350						2500						2500			
		Height (EH)		1800						1800						1800			
Reaction Load	Machine	Nomal	Ra	14300		15300		9000		18400		20000		13100		24500		13100	
			Rb	7700		7800		600		9000		9800		600		12200		700	
		Through Type	Ra	17800		19100		9000		23000		25000		13100		30600		13100	
			Rb	9600		9700		600		11200		12200		600		15200		700	
	PIT	Nomal	Rc	23000		31000		31700		32500		42500		36000		43100		51000	
			Rw	18000		26000		11100		26000		3700		12100		36700		19100	
		Through Type	Rc	28700		38700		31700		40600		53100		36000		57600		51000	
			Rw	22500		32500		11100		32500		46000		12100		45900		13100	

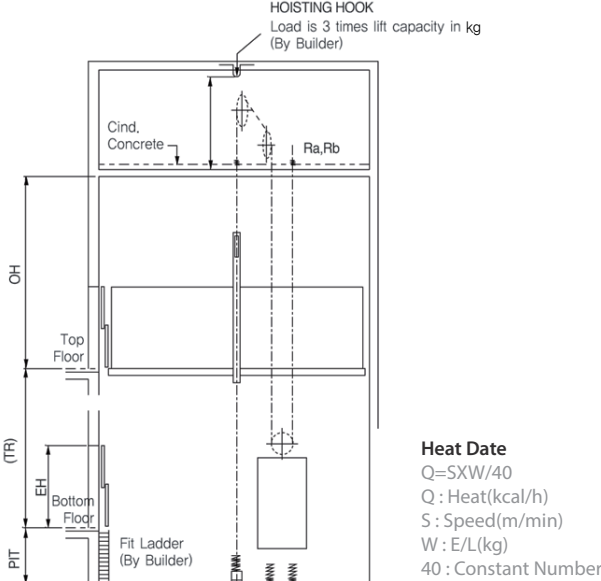
! The actual product can be different (changed) depending on design

Layout

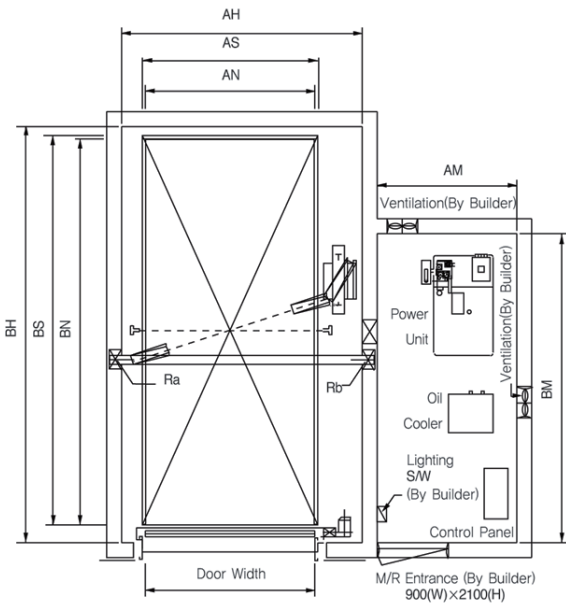
I Hoiswtay and M/R Plan (Traction Rope Type)



I Section



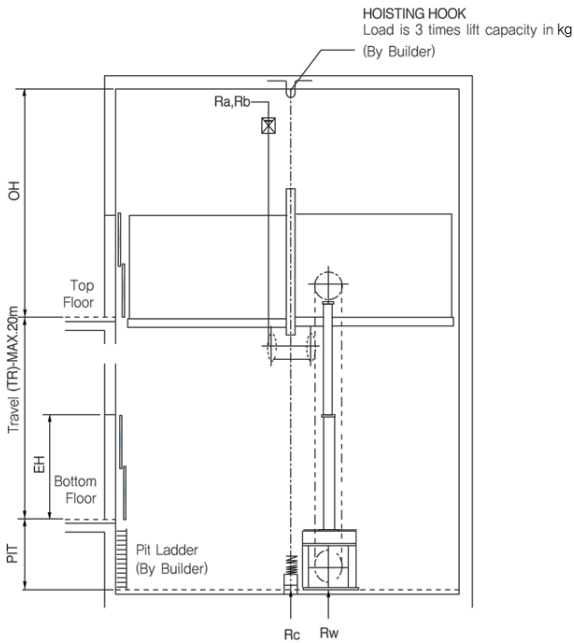
I Hoiswtay and M/R Plan (Hydraulic Type)



Heat Date
 $Q = (585 \times P \times Tr) / (51 + Tr \times 2)$
 Q:Heat(kcal/h)
 P:Motor Capacity (kW)
 Tr:Travel Time (m/sec)
 TR:Travel (m)
 585,51 : Constant Number

Heat	Tr
20 (m/min)	3TR+3.35
30 (m/min)	2TR+3.35

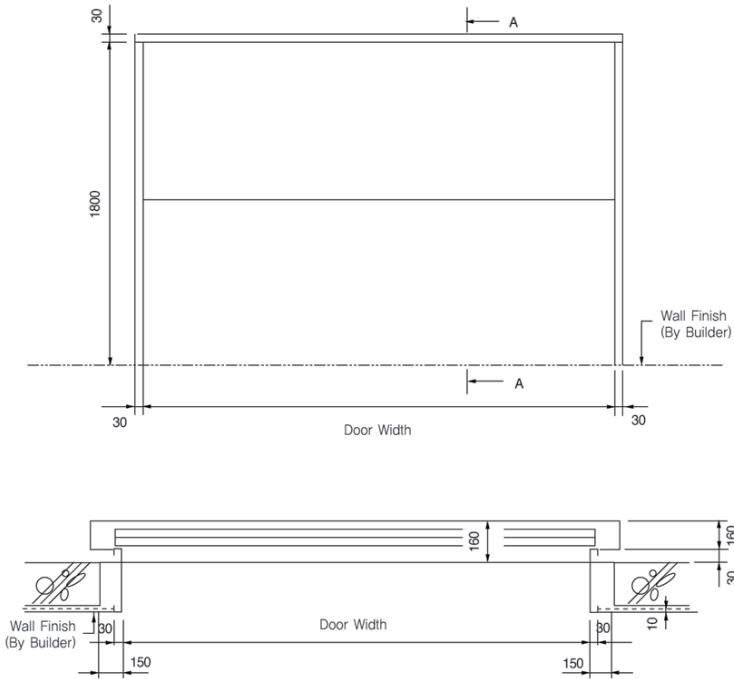
I Section



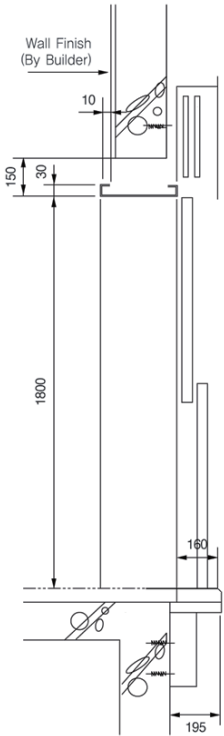
Note
 1. Overhead from FFL top floor to bottom of shaft ceilings slab
 2. Pit depth from FFL bottom floor to top of shaft floor slab

Layout

I Entrance Front View



I Section A-A



I Structural Opening

