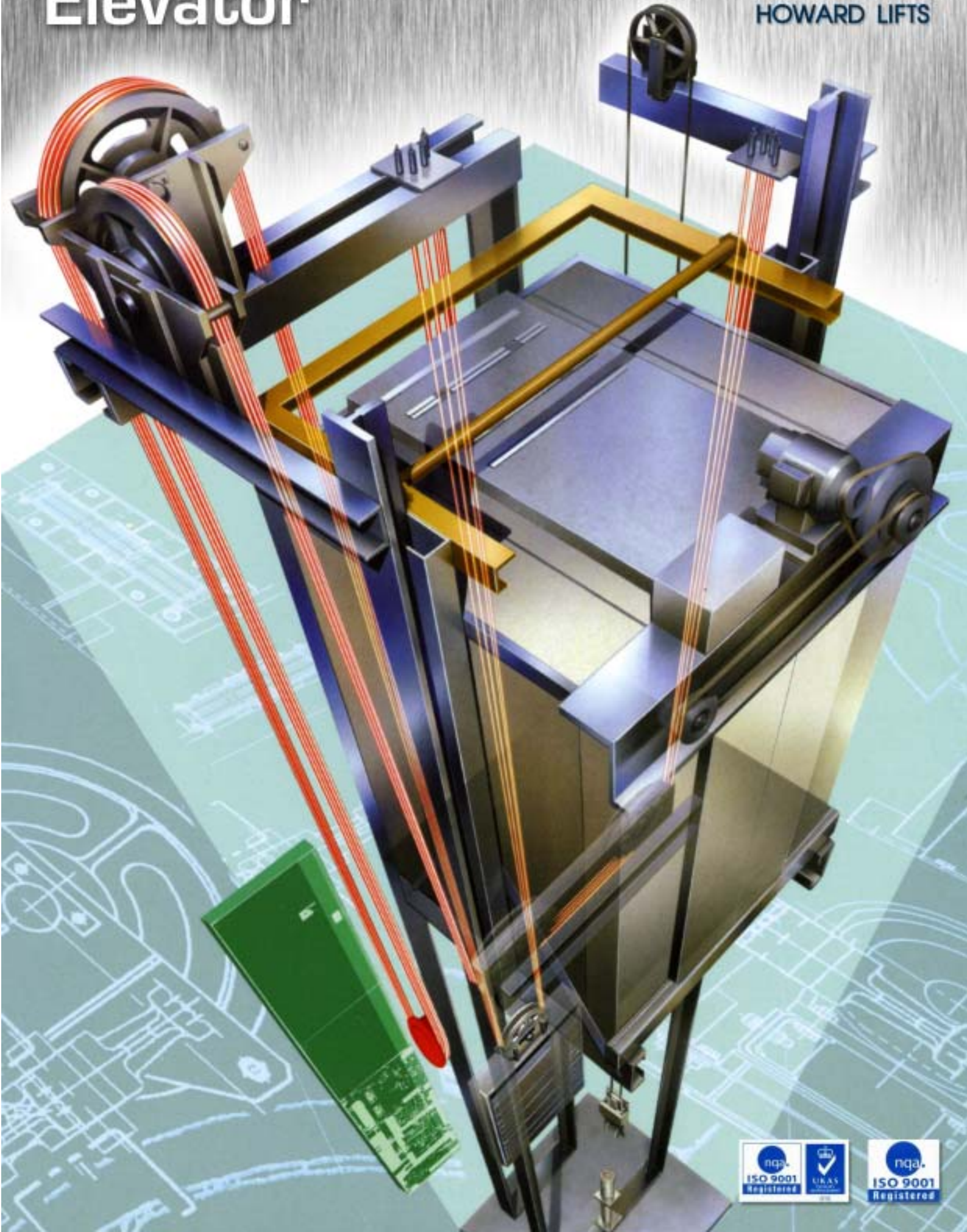


Machine Room Less Elevator


HOWARD LIFTS



FD-S01



- Ceiling** 4 Halogen lamp with painted steel sheet
- Wall&Door** Hairline finished stainless steel sheet
- Handrail** HRX-K61, Stainless steel pipe [Option]
- Sill** Extruded Aluminum

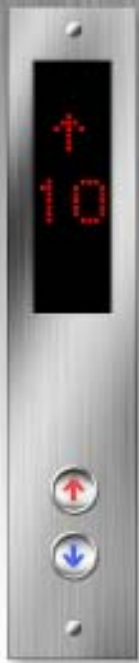
Color shown may differ from actual tone



Ceiling
Wall&Door
Handrail
Sill

Fluorescent lights and 4 Halogen lamp with Painted steel sheet
Embossed stainless steel sheet (Option)
HRX-K61, Stainless steel pipe (Option)
Extruded Aluminum

Color shown may differ from actual tone



IN-S19CBZ



IN-S19CCA (For 2 Cars)

IN-S19CBZ

Hall indicator & Soft Push Button Combination type

IN-S19CCA (For 2 Cars)

Hall indicator & Soft Push Button Combination type

Indicator : 5X7 dot-matrix LED with Moving Arrow

Button Head : Tactile type button
(Stainless steel, Character resin with Blue color, LED illuminates in Orange)

Face Plate : Hairline finished Stainless Steel



HB-S19CCB



HB-K11X



IN-K21X

HB-S19CCB

Soft Push Hall Button

Button Head : Tactile type button
(Stainless steel, Character resin with Blue color, LED illuminates in Orange)

Face Plate : Hairline finished Stainless Steel

HB-K11X

Soft Push Hall Button

Button Head : Grey Acrylic resin, LED illuminates in Orange

Face Plate : Hairline finished Stainless Steel

IN-K21X

Hall Indicator

Indicator : 5X7 dot-matrix LED with Moving Arrow

Face Plate : Hairline finished Stainless Steel



IN-K11X



IN-61X (For 2 Cars)

IN-K11X

Hall Indicator & Soft Push Button Combination type

Indicator : 5X7 dot-matrix LED with Moving Arrow

Button Head : Grey Acrylic resin, LED illuminates in Orange

Face Plate : Hairline finished Stainless Steel

IN-61X (For 2 Cars)

Hall Indicator & Soft Push Button Combination type

Indicator : 5X7 dot-matrix LED with Moving Arrow

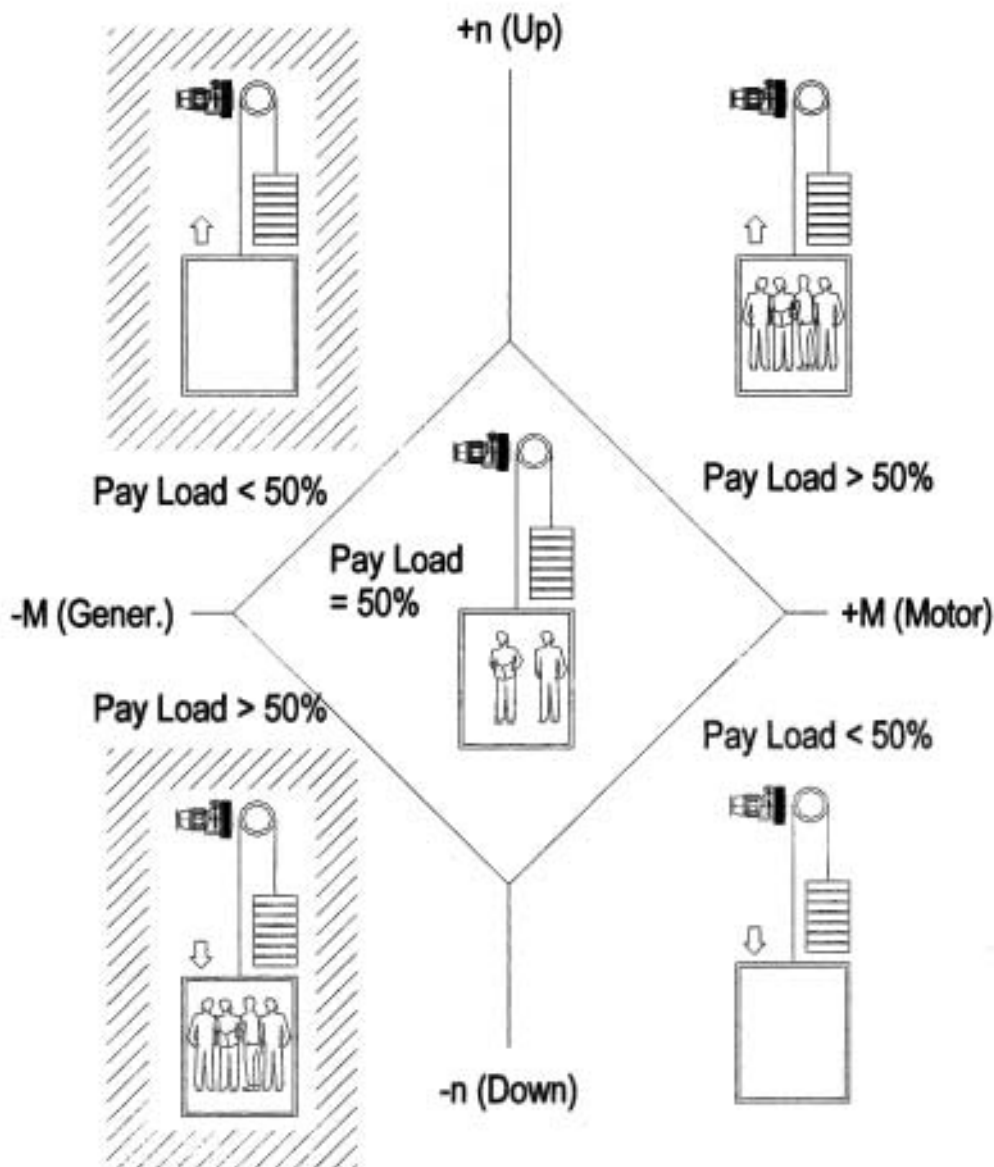
Button Head : Grey Acrylic resin, LED illuminates in Orange

Face Plate : Hairline finished Stainless Steel



Features

- Movement continuity until the next stop on a totally automatic way
- Rescue control panel with operation supervision
- override of the safety serial by key and the up/down selector
- Break automatically control and car race away limitation



Integrated Servomotor

Innovative technology

- Planetary lift machine with integrated servomotor
 - Extremely flat design for the installation of standard cars in standard shafts
 - Mechanical and electrical remote control
- no machine room necessary giving the architect much more flexibility in designing

Superior conception

- Efficiency > 90%
 - Stiction - free gear reducer
- state-of-the-art economic lift conception
- low connection values and a low energy consumption

1:1+1:2 Suspension



Silent

Unprecedented safety

- Low maintenance 2-circle shoe brake with wear monitoring switch
- Proven components
- Drives are 100% controlled

- safe operation
- highly reliable with long service life (≥ 20.000 h running time)
- fast and safe evacuation is guaranteed

Utmost reliability

- Highly integrated design
- Choice of manual or electric lift evacuation options

- safe operation in mains/battery operation
- fast and safe evacuation is guaranteed

Unlimited variability

- 1:1 and 2:1 suspension possible
- Lateral installation on the top or the bottom of the shaft
- High torque reserves thanks to our planetary gear system

one drive concept fits all current applications

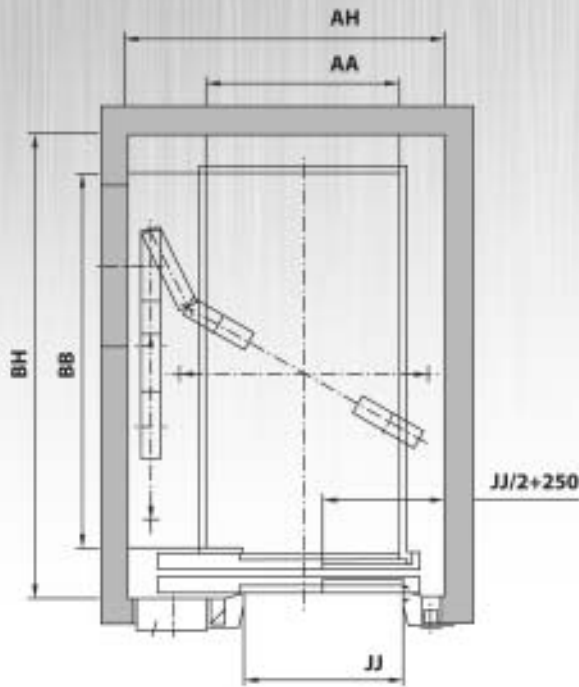
Convincing quality

- Gear reducer with excellent tooth quality
- Servomotor with high quality resolver principle

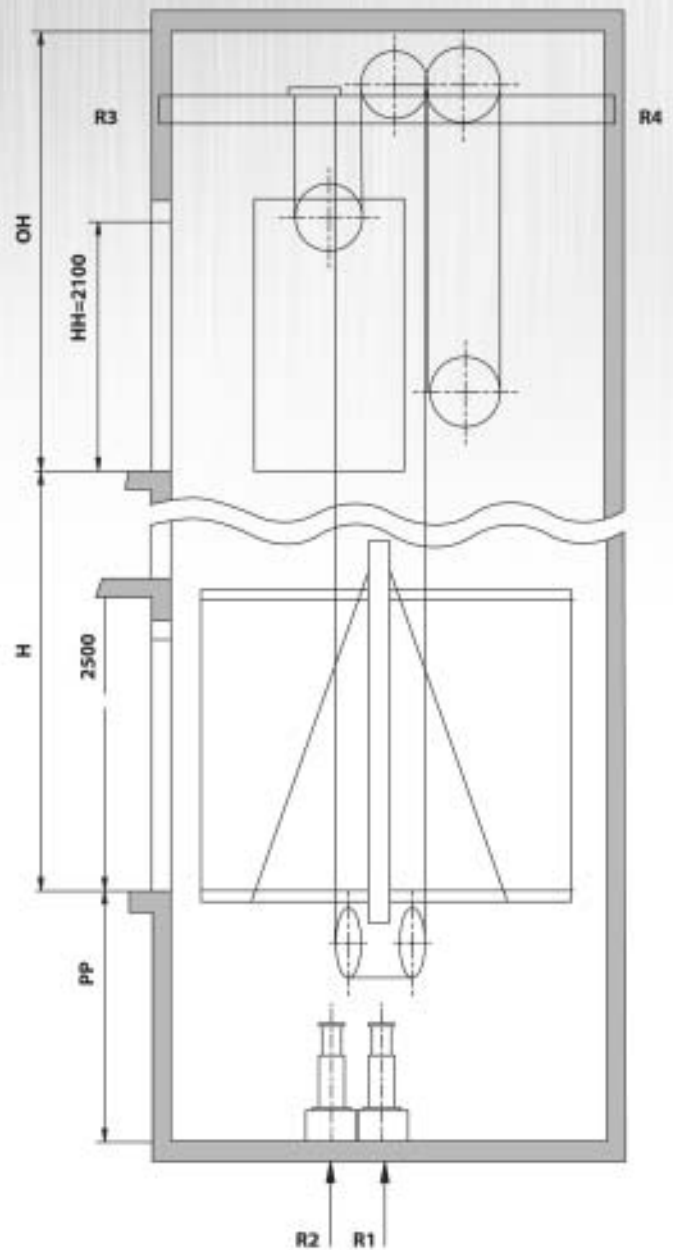
no wear and a contrast high travelling comfort



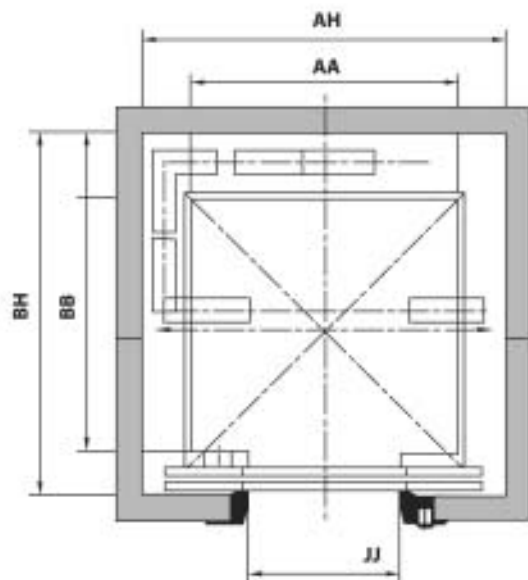
Hoistway plane layout for side opening door



Hoistway vertical section



Hoistway plane layout for central opening door



Side opening door for details

[kg/]	[m/s]	JJXHH	AAXBB	AHXBH	PP	OH	H	[kgf]			
								R1	R2	R3	R4
550	0.5	700X2100	1000X1200	1700X1700	1450	3650	H<30	5000	3600	3200	2200
	1.0				1550	3700					
630	0.5	800X2100	1100X1400	1800X1900	1450	3700	H<30	5670	4400	2550	1980
	1.0				1600	3800					
750	0.5	800X2100	800X2100	1800X2200	1500	3700	H<35	7200	5600	3250	2550
	1.0				1600	3800					
1000	0.5	900X2100	1100X2100	1800X2600	1500	3700	H<35	8800	6800	4000	3100
	1.0				1600	3800					

Central opening door for details

550	1.0	800x2100	1400x1000	1850x1600	1400	3700	H<30	5000	3600	3200	2300
	1.5				1500	3800					
630	1.0	800x2100	1400x1100	1850x1700	1400	3700	H<30	5690	4400	2550	1980
	1.5				1500	3800					
750	1.0	800x2100	1400x1350	1850x1950	1400	3750	H<35	7200	5600	3250	2550
	1.5				1500	3850					
1000	1.0	900x2100	1600x1500	2150x2150	1400	3850	H<35	8800	6800	4000	3610
	1.5				1550	3950					
1350	1.0	1100x2100	2000x1500	2600x2150	1550	3950	H<35	11880	9200	5950	4600
	1.5				1600	4000					



Car Interior

- Ceiling : Spray-painted sheet steel with selected colours
- Well : Spray-painted sheet steel with selected colours
- Car Door : Spray-painted sheet steel with selected colours
- Floor : Spray painted checkered plate steel selected colours

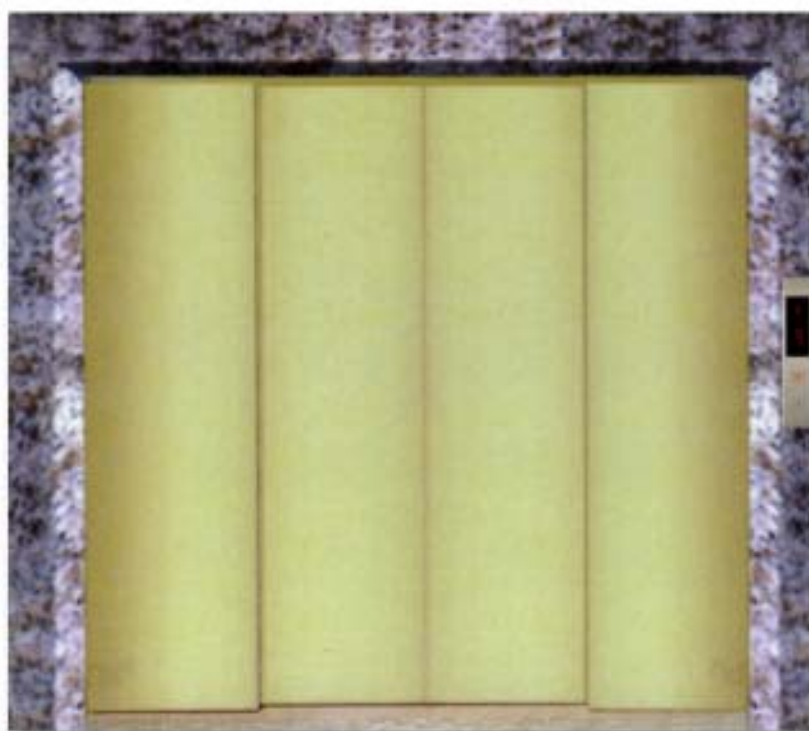
The car has a clear end clean structure with light and round fan

Landing entrances

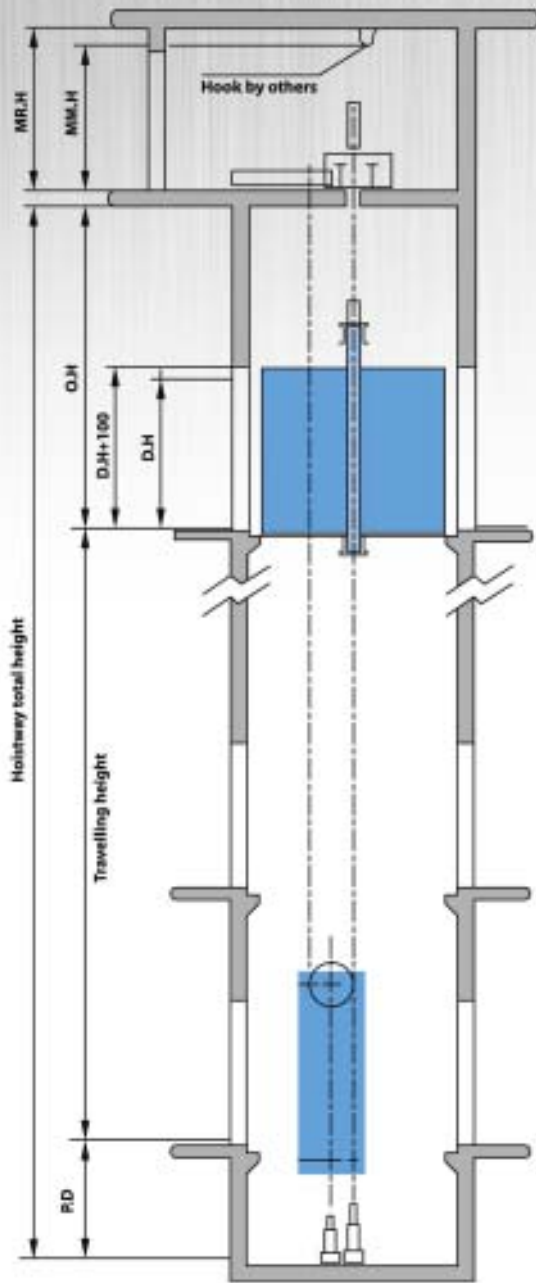
Central opening door four panel

Jamb narrow, painted sheet steel with selected colours

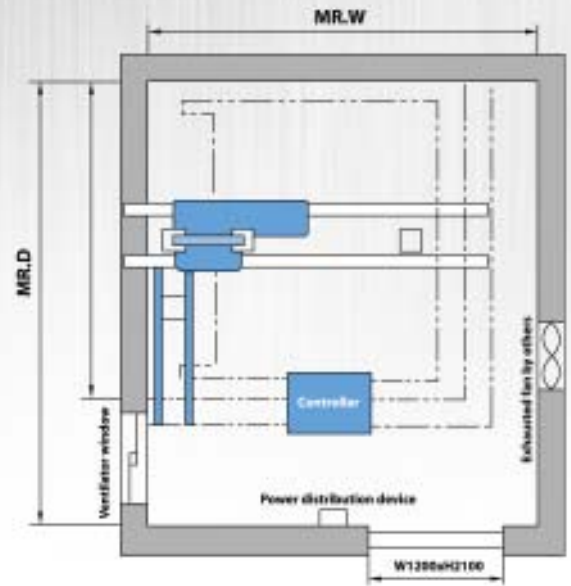
Door painted sheet steel



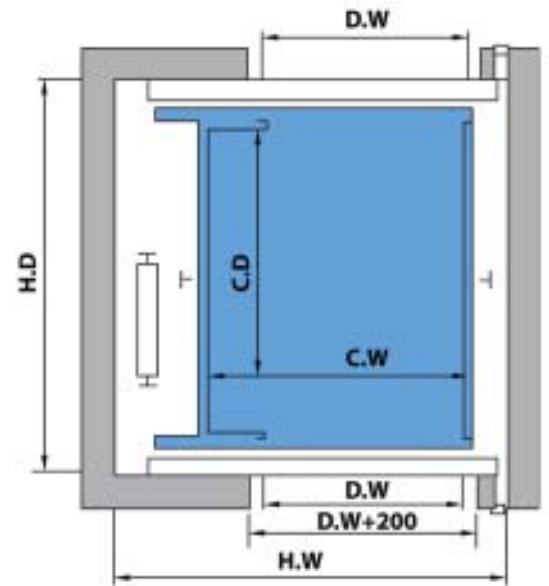
Hoistway vertical section



Machine room plane layout



Hoistway plane layout



[kg] Load capacity	[m/s] Speed	[mm] Car size C.W'xC.D'	D.W[mm]xD.H[mm] Door net widty		[mm] Hoistway size			[mm] Machine room size		Motor power [kw]
			Side opening	Four door panels central opening	H.WxH.D	O.H	P.D	MR.WxMR.D	NMR.H	
500	0.5	1500x1500	1100x2100		2250x1900	4500	1500	3000x3000	2200	7.5
		1500x2000			2250x2400					
1000	0.5	1500x2000	1100x2100		2250x2400	4500	1500	3000x3000	2200	7.5
		2000x2000			2850x2400			3500x4000		
		2000x2500						2850x2900		
2000	0.5	2000x2500	1500x2100		2850x2900	4500	1500	3500x4000	2200	11
		2000x3000			1800x2200			2850x3400		
		2500x2500	3450x2900	4000x4000						
		2500x3000	3450x3400	4000x4200						
		2500x3500	3450x3900							
3000	0.5	2500x3500		1800x2200	3450x3900	4500	1700	4000x4200	2200	19
5000	0.25	3500x4000		2200x2200	4500x4400	5000	1700	4500x4400	2700	19
5000	0.5	3500x4000		2200x2200	4500x4400	5000	1700	4500x4400	2700	22



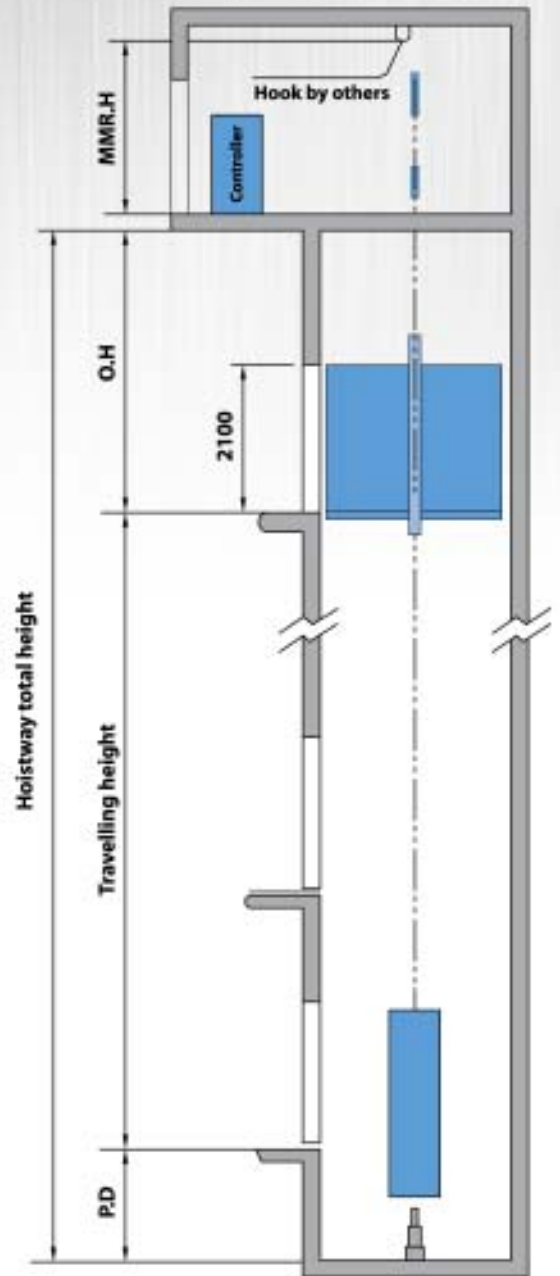
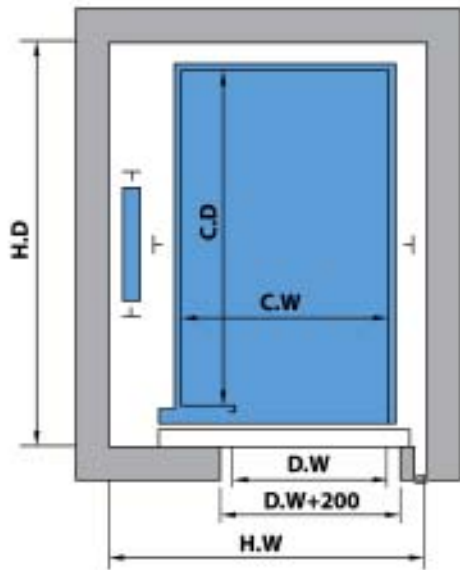
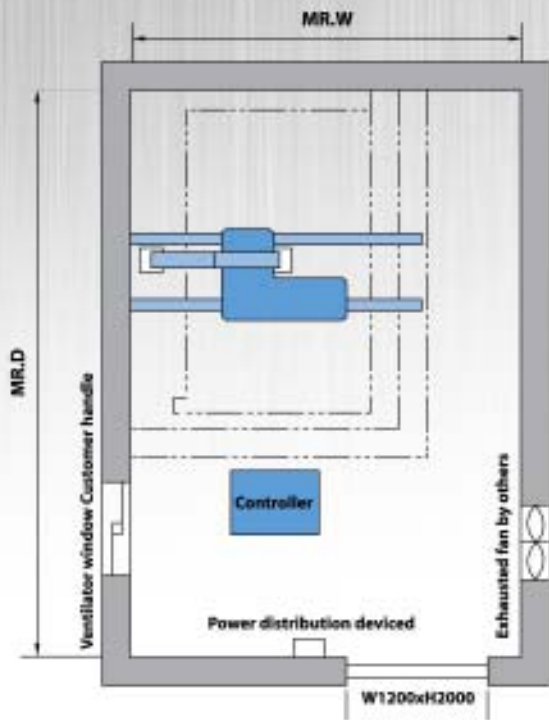
Car interior

- Ceiling : stainless steel hairline finish fraw with bright fluorescent lighting through acrylic diffuser
- Well : Plastic laminate in selected
- Car Door : Stainless stell hairline finish
- Floor : Hard wearing rubber matt with selected colours
- Handrail : Stainless steel



Car interior

- Ceiling : stainless steel hairline finish fraw with bright fluorescent lighting through acrylic diffuser
- Well : Stainless steel hairline finish
- Car Door : Stainless steell hairline finish
- Floor : Hard wearing rubber matt with selected colours
- Handrail : Stainless steel



Side opening door for details

Persons	[kg] Load capacity	[m/s] Speed	(mm) Car net size	D.W [mm] Door net width		(mm) Hoistway size				(mm) Machine room size		Motor power [kw]	
			C.WxC.D	Side opening	Central opening	H.WxH.D Side opening	H.WxH.D Central opening	O.H	P.D	MR.WxMR.D	NMR.H		
15	1000	1.0	1500x2300	1100	1000	2300x2900	2300x2900	4400	1500	3350x4850	2500	11	
		1.5						4500	1600				18.5
		1.75											
24	1600	1.0	1500x2500	1100	1000	2300x3100	2300x3100	4500	1600	3350x4850	2500	18.5	