ISO 9001
Certificate

ISO 14001
Certificate

SIGMA Your Elevator Partner
www.sigmaelevator.com

2012.12 Printed in Korea / Revision No. 0

MUSE™ NV

Machine Roomless Elevator

Your Elevator Partner… SIGMA

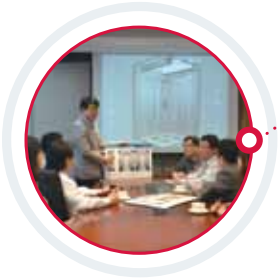
www.sigmaelevator.com

SIGMA

SIGMA Ride tomorrow, Lift future

Korean Engineered Products

SIGMA products are engineered by highly qualified Korean engineers and ensure customers to receive excellent products with reliable quality.



Aesthetics Design Excellence

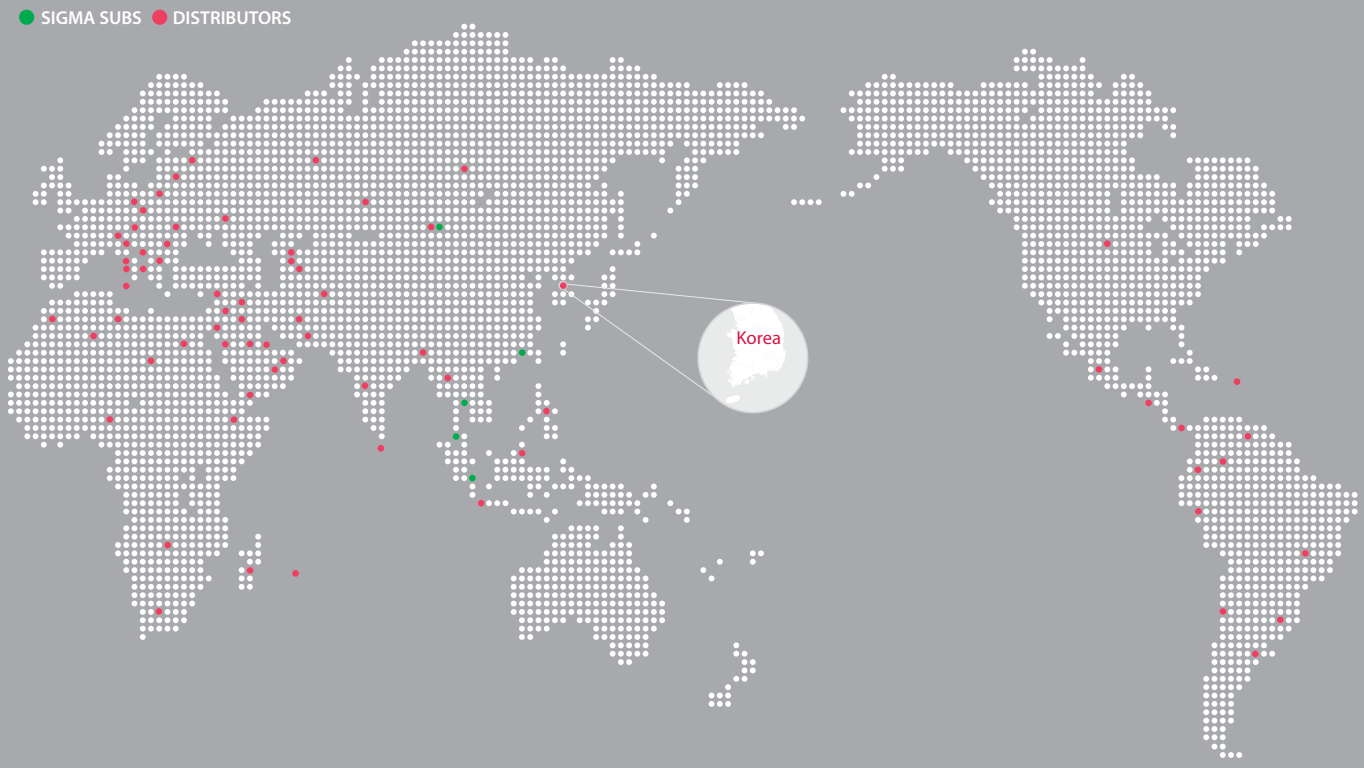
SIGMA's Design Center in Korea and China are fully equipped with professionals who follow the most up-to-date aesthetic designs to satisfy customers needs.

Global Network

SIGMA has been with you for more than 45 years serving over 60 Countries.

SIGMA Global Network

SIGMA has already exported approximately 100,000 elevators
worldwide since year 1978




Khalid Al Attar Tower
UAE


Al Rames Tower
Qatar


Darwaza Tower
Kuwait


Vorobievy 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


ASEM Tower
Korea


Intercontinental Hotel
Korea


Korea World Trade Center
Korea


Plaza La Castellana
Venezuela


Torre Global Bank
Panama

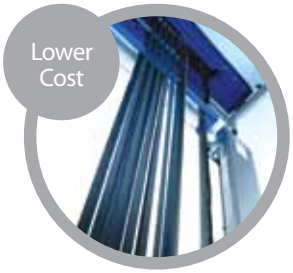

Ocean Two
Panama

Next Generation Elevator

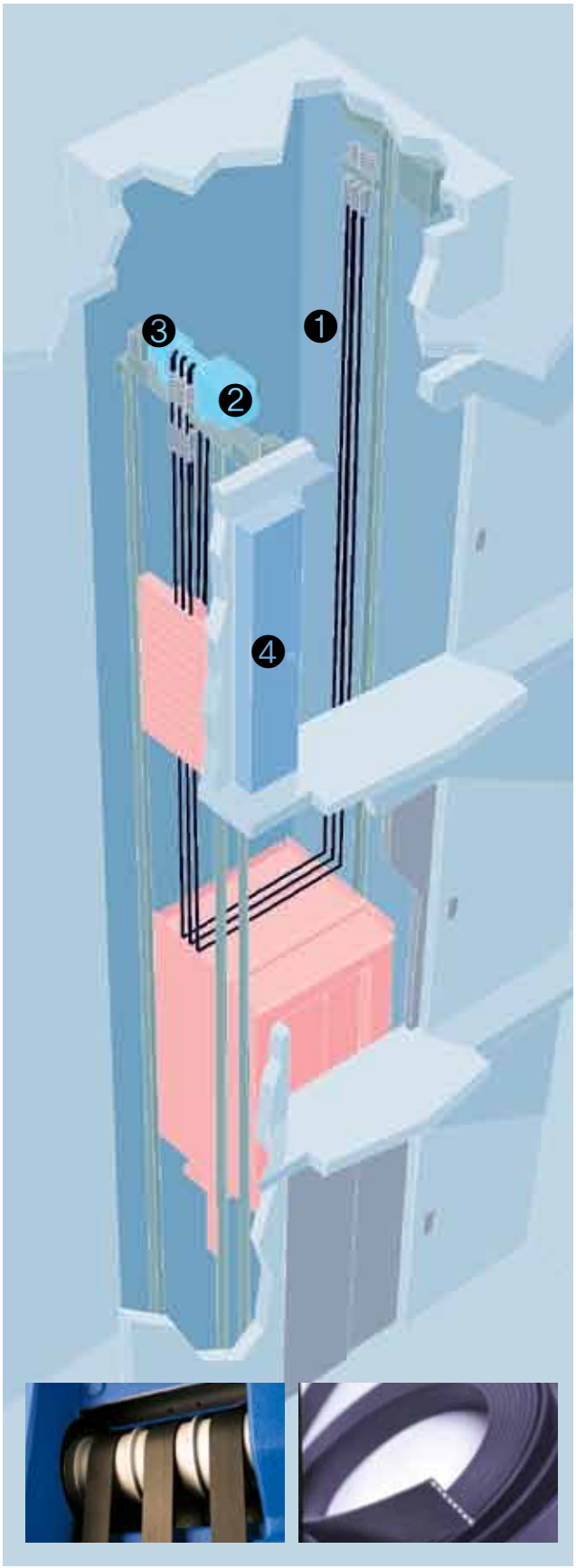
PM Gearless, coated steel reinforced belt and green technology
that re-invents an industry

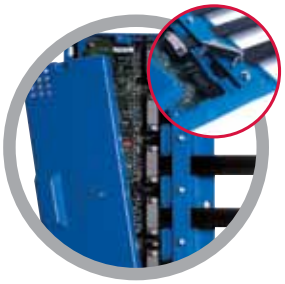
❶ Flexible Steel Belts
The polyurethane-coated flat steel belt is up to 20% lighter and lasts up to 3 times longer than conventional ropes. Its flexibility results in a much smaller bending radius.

❷ Compact Gearless Machine
A sheave has allowed SIGMA to design a machine that is up to 70% smaller than conventional ones

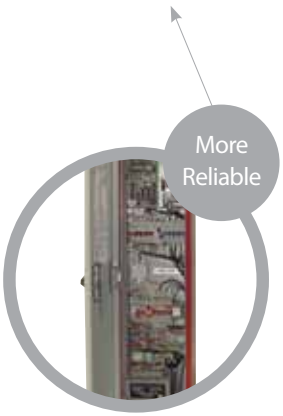


Machine Roomless System
The compact MUSE NV gearless machine does not require a machine room and can be easily positioned on the guide rails. This means all bearing loads can be transferred to the pit, thus reducing structural building costs.





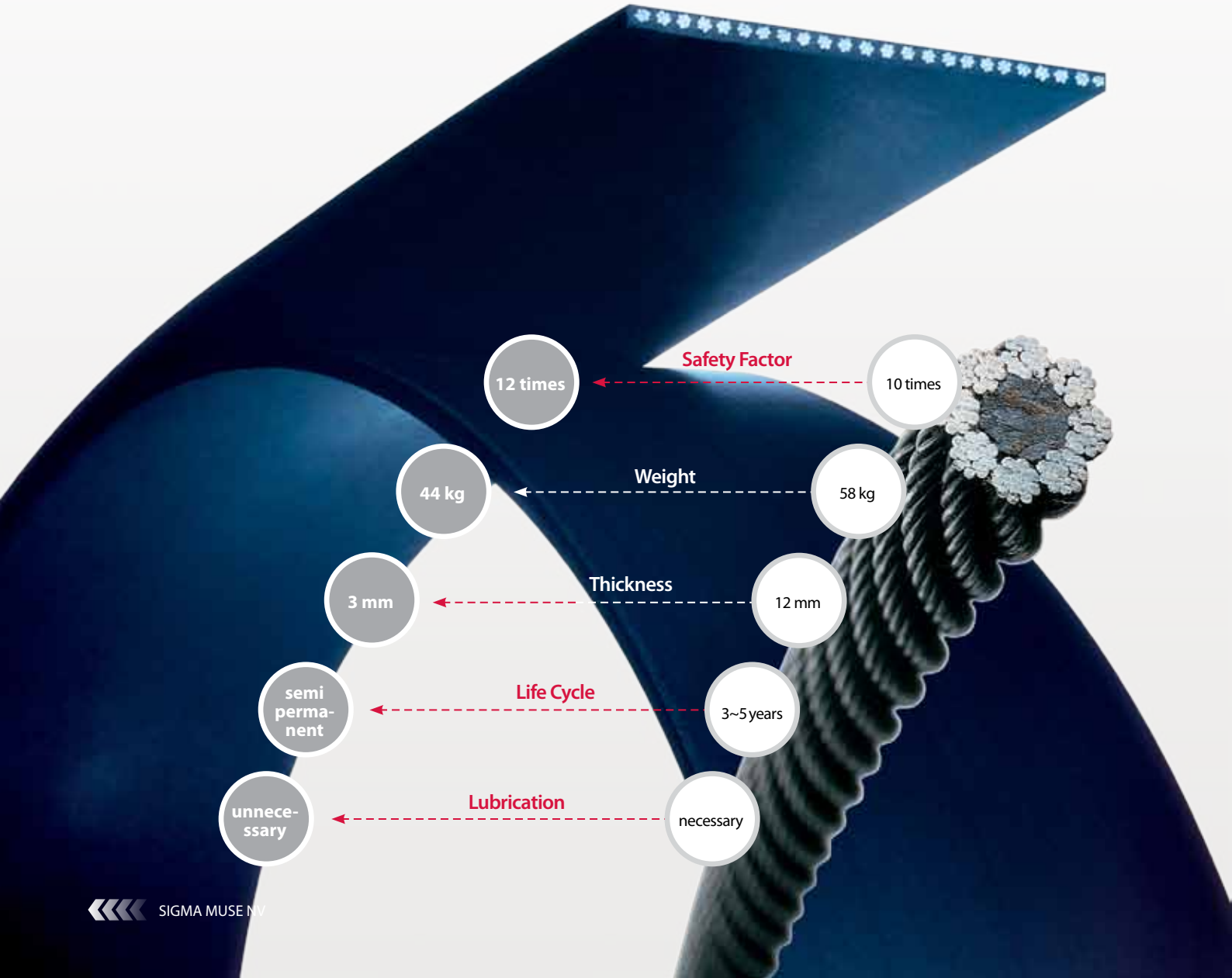
❸ PULSE System
The PULSE electronic system continually monitors the status of the belts' steel cords. In contrast to visual inspections of conventional steel ropes, the PULSE system automatically detects and informs technicians of the quality of the belt cord, thus eliminating downtime and greatly enhancing the reliability of the inspection.

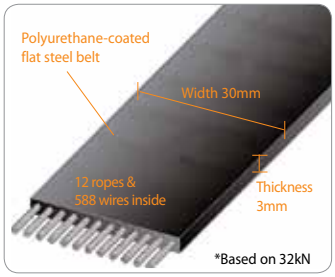


❹ Reliable Controller
Designed for groups of up to four cars, the modular controller incorporates a new generation of printed circuits and software to provide optimal response time.
The digital closed-loop variable frequency (VF) drive, with vector control technology, further increases efficiency and accuracy, and a digital speed encoder ensures correct car speed and positioning. The result is a system of exceptional reliability.

Coated Steel
Reinforced Belt

The passengers' safety is of the utmost importance,
so SIGMA maintains the highest standards in safety technology.
The flat belt technology used in the
MUSE NV represents a superior innovation in safety.



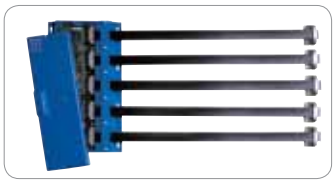


12 Times Safer Technology

The polyurethane coated belts improve safety by 12 times by reducing the danger of abrasion found in existing rope-type elevators.

Semi-permanent Lifetime

The lifetime of polyurethane coated belts with a thickness of 3mm, a width of 30mm, and 588 wires is three times longer than the ropes used in existing systems which require periodic replacement every 3 - 5 years.



PULSE System

The PULSE System electrically checks the abrasion status and operating conditions in real-time to make maintenance more efficient and easier.

20% Lighter Belt

Weighing 20% less than the steel ropes used in other elevators, the flat belt significantly reduces energy consumption.

MUSE NV's flat belt system ensures your safety.

Leading to a Green Future

MUSE NV makes our world better.

MUSE NV realizes sustainable growth, with low cost and high energy efficiency, by applying an environmentally friendly and energy efficient system. And, MUSE NV also provides a comfortable ride that no other system can offer.

Lubrication-Free

Neither the belts nor the gearless machine with sealed-for-life bearings require any form of polluting lubricants. The need for oil in the machine is eliminatd by the abscence of a gear box. Unlike steel cables, the belts require no lurication.

Soft and Quiet Ride

VVVF digital closed-loop drive minimizes internal vibration and the flat belts eliminate the metallic rubbing noise that comes from the steel ropes and sheaves found in other elevators.

30% Energy Saving System

The low-inertia gearless machine with a permanent magnet (PM) synchronous motor means energy savings and reduced operating costs.

MUSE NV reduces the energy consumption **up to 30%**

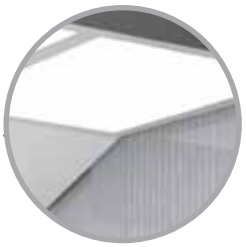
Category	Conventional Elevator	MUSE NV
Machine	Geared Machine	PM (Permanent Magnet) Gearless Machine
Energy Efficiency	Geared (80%)	Gearless (90%)
Power Consumption (For 17-Passengers)	47.7 kwh	34.3 kwh

MUSE NV is an eco-friendly
next generation elevator.

MUSE NV Standard Design & Fixtures

Modern | Elevator Design |

Simple stripe pattern of Modern is the basic design, preferred by many people.



C-RS1

One side of ceiling is lifted, so the space is increased.

Front View

Rear View

Specification

CEILING	C-RS1
COP	CBX-22C
CAR DOOR FINISH	EH3-084
HANDRAIL	HR04-38HL
FLOOR	Decotile

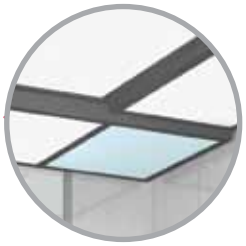
! The actual product can be different (changed) depending on design
Car wall image can be different (changed) depending on capacity

MUSE NV Standard Design & Fixtures

Mondrian | Elevator Design |

Mondrian shows the beautiful appearance with its colorful light and quiet pattern of wall

Front View



C-RS2

The acryl ceiling in Mondrian look brightens the space and provides the artistic atmosphere.

Rear View

Specification

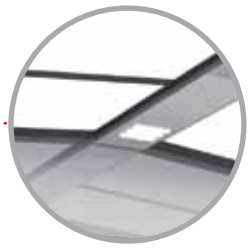
CEILING	C-RS2
COP	CBX-22C
CAR WALL FINISH	EH3-034
HANDRAIL	HR04-38HL
FLOOR	Decotile

! The actual product can be different (changed) depending on design
Car wall image can be different (changed) depending on capacity

MUSE NV Standard Design & Fixtures

Tangent | Elevator Design |

The tangent design with stainless mirror and floral pattern ignites the sense of modern design.



C-NL2

The center of the ceiling is mounted, and the car space looks wider

Front View

Rear View

Specification

CEILING	C-NL2
COP	CBX-22C
CAR WALL FINISH	EH1-086
HANDRAIL	HR04-38POL
FLOOR	Decotile

! The actual product can be different (changed) depending on design
Car wall image can be different (changed) depending on capacity

Car & Landing Fixtures

COP

CBM-22

CBX-22C

Handicapped COP

CBM-44SH

Vertical Hall Indicator

VIX-M652

VIX-MA52S

Hall Button

HBM-R45

HBM-RA5S

HBM-R65

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

Car & Landing Fixtures || (Option)

COP Premium Design (Option)

CBM-16

CBX-16C

Vertical Hall Indicator Premium Design (Option)

VIX-M692

VIX-MA92S

Hall Button

HBM-S49

HBM-SA9S

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

Car & Landing Fixtures ||| (Option)

COP

CBL-85C

Horizontal Hall Indicator

HIL-C193

HIL-A193

Vertical Hall Indicator

VIL-MBB2S

Hall Button

HBM-RBBS

Handicapped COP

CBM-D1SH

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

Car Position Indicator

CIX-10

CIX-13

Horizontal Hall Indicator

HIX-A162

HIX-C162

Hall Lantern

HLV-C08

HLV-C11

HLV-C48

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

Ceiling Designs

C-RS1 (LGP-945)

C-RS2 (LGP-945)

C-NS1

C-NS3

C-RL1 [Option]

C-NL2 (LGP-945) [Option]

(Including Air Purifier)

C-RL2 [Option]

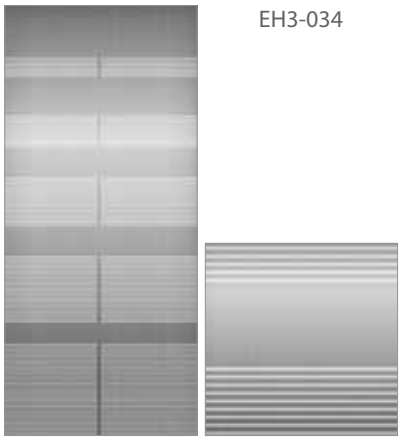
Colors

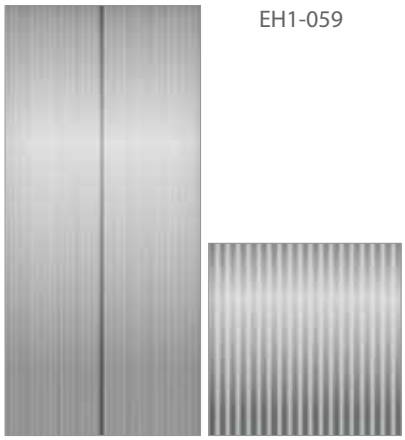
P-001 P-002 P-003 P-004 P-005 P-006 P-007 P-010 P-011 P-012

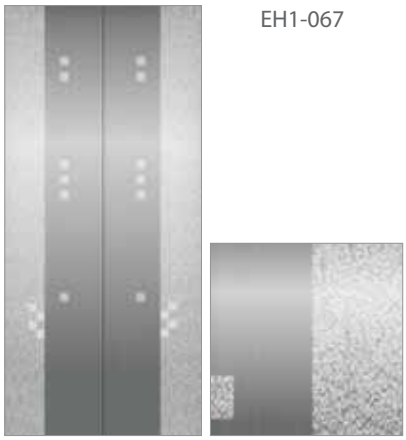
! The actual product can be different (changed) depending on design

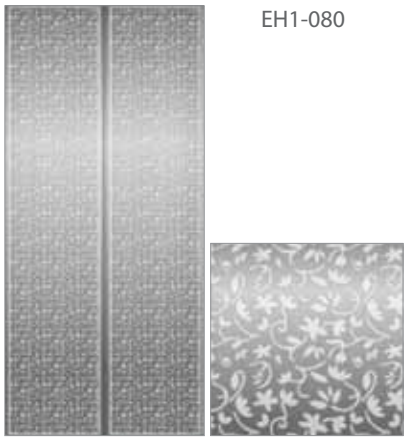
Etching Pattern

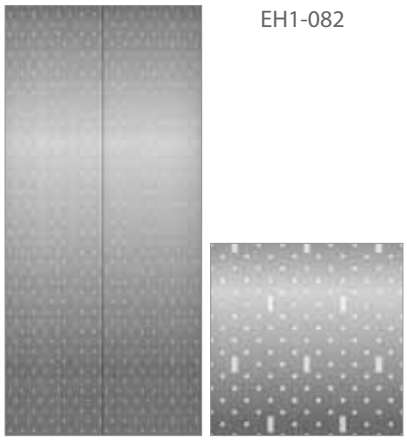
STS Etching Pattern

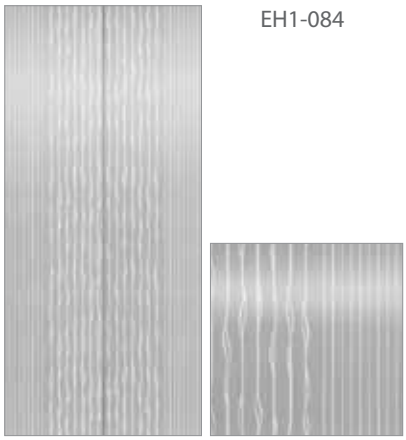

EH3-034


EH1-059

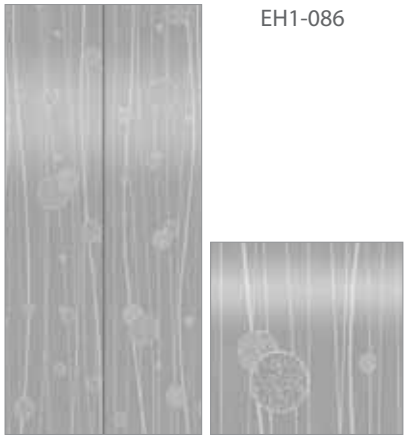

EH1-067


EH1-080


EH1-082


EH1-084


EH1-085


EH1-086


EH1-087

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

Entrance Design

Ground Floor

JAMB	J-311 (STS Mirror)
DOOR	STS Mirror Etching (EH1-085)
HALL IND	HIX-A162
HALL LANTERN	HLV-C08
HALL BUTTON	HBM-R45

Top Floor

JAMB	J-301 (STS Hairline)
DOOR	STS Hairline Etching (EH1-085)
HALL IND & BUTTON	VIX-M652
LANDING CABINET	STS Hairline

Typical Floors(Option)

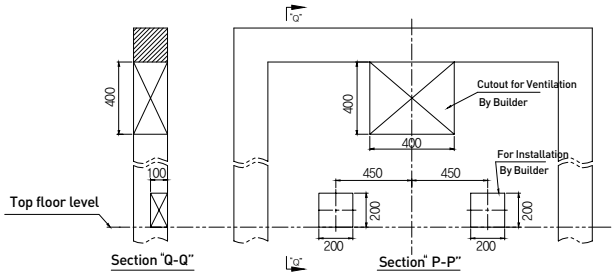
JAMB	J-301 (STS Hairline)
DOOR	STS Hairline Etching (EH3-034)
HALL IND & BUTTON	VIX-M652

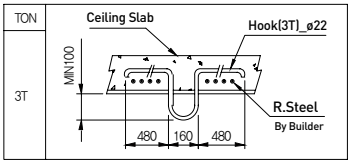
Typical Floors

JAMB	J-101 (STS Hairline)
DOOR	Stainless Steel Hairline
HALL IND & BUTTON	VIX-M652

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

Technical Data Overhead

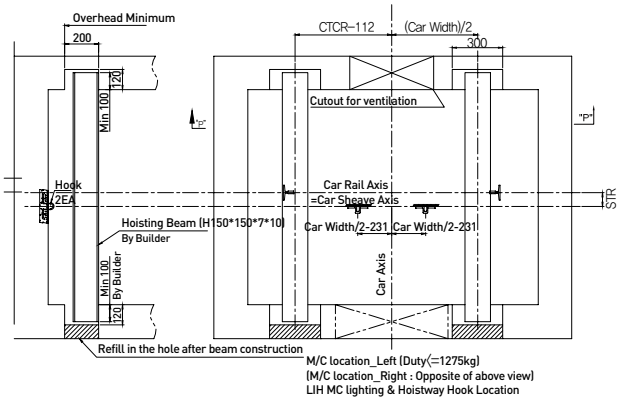




Hook detail

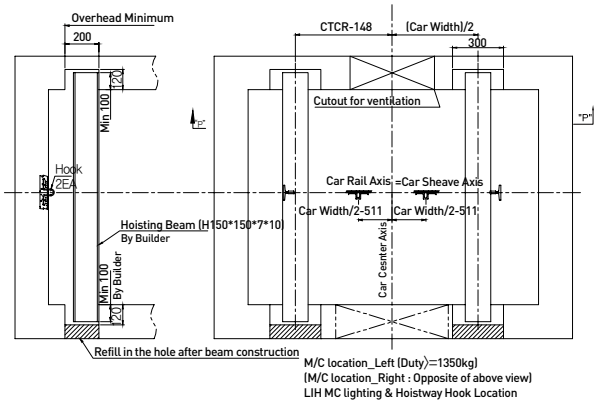
DUTY (kg)	SPEED (m/s)	K-CH (mm)	TYPE
⟨=1275	1	⟨1533	TYPE 2
	1	⟩=1533	TYPE 1
	1.5	⟨1680	TYPE 2
	1.5	⟩=1680	TYPE 1
	1.75	⟨1743	TYPE 2
	1.75	⟩=1743	TYPE 1
⟩=1350	1	ALL	TYPE 3
	1.5	⟨1942	TYPE 4
	1.5	⟩=1942	TYPE 3
	1.75	⟨2005	TYPE 4
	1.75	⟩=2005	TYPE 3

TYPE 1



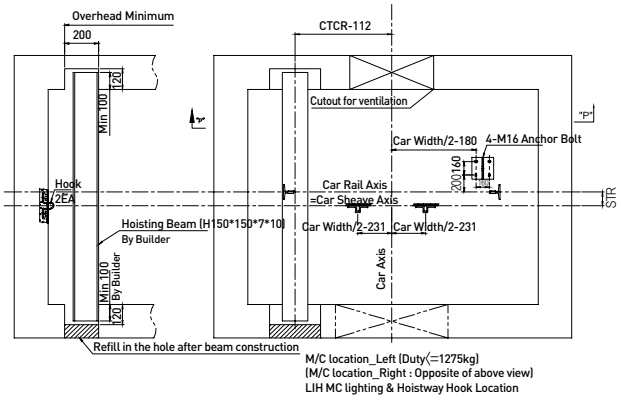
M/C location_Left (Duty⟨=1275kg)
(M/C location_Right : Opposite of above view)
LIH MC lighting & Hoistway Hook Location

TYPE 3



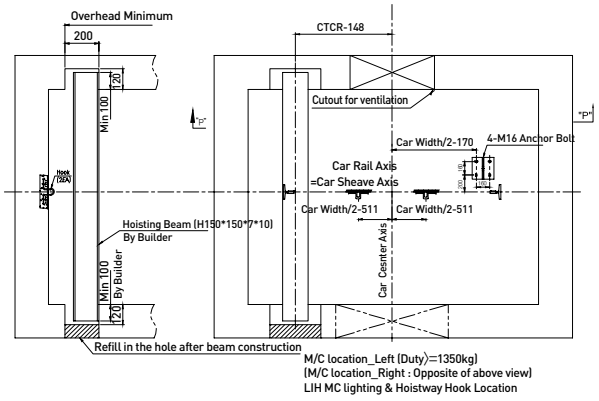
M/C location_Left (Duty⟩=1350kg)
(M/C location_Right : Opposite of above view)
LIH MC lighting & Hoistway Hook Location

TYPE 2



M/C location_Left (Duty⟨=1275kg)
(M/C location_Right : Opposite of above view)
LIH MC lighting & Hoistway Hook Location

TYPE 4

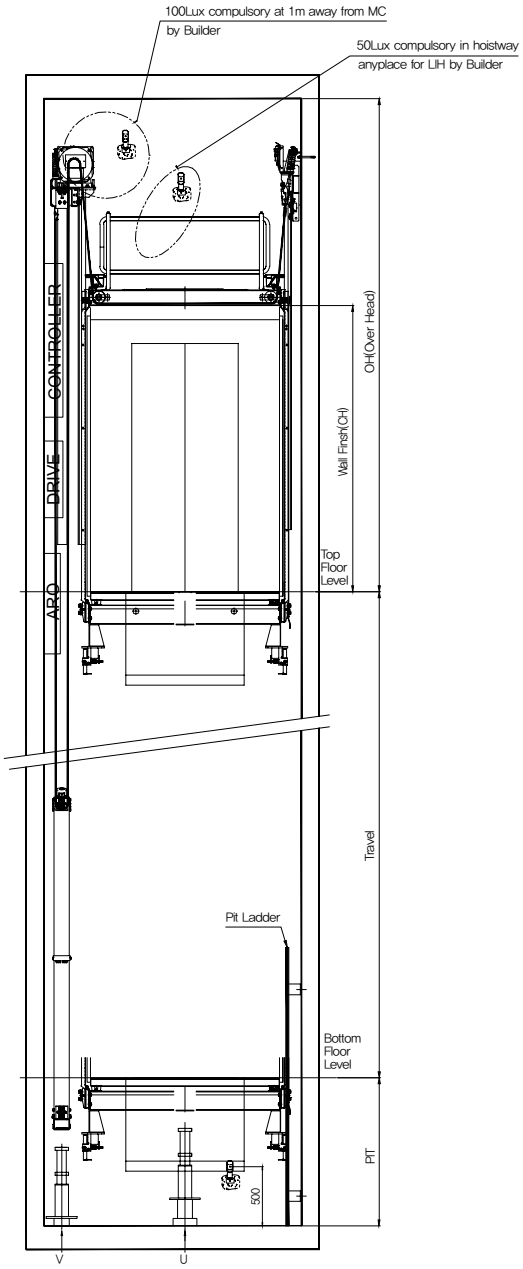


M/C location_Left (Duty⟩=1350kg)
(M/C location_Right : Opposite of above view)
LIH MC lighting & Hoistway Hook Location

Contact our company for overhead reaction force and the dimensions of detailed hoist-way patch

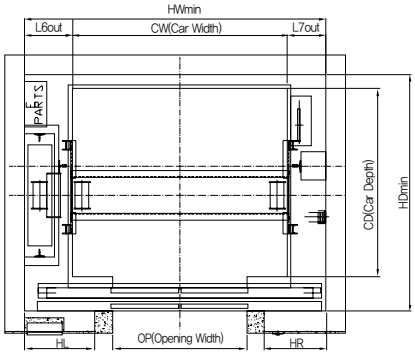
Technical Data Hoistway

Hoistway Section

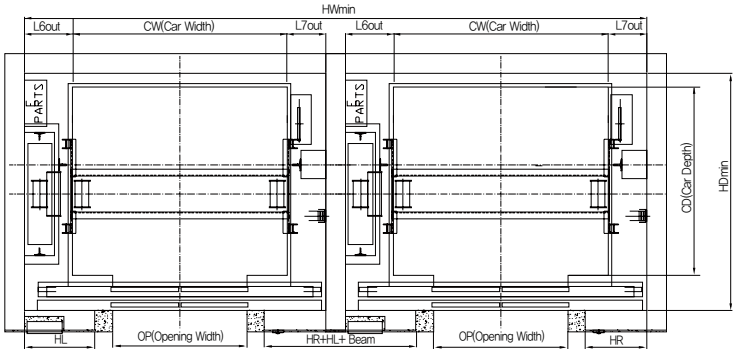


Hoistway Plan

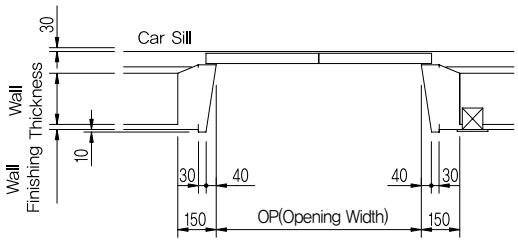
(Passenger / Simplex)



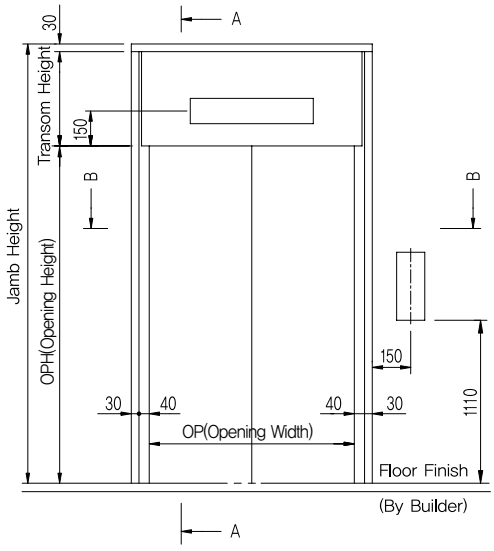
(Passenger / Duplex)



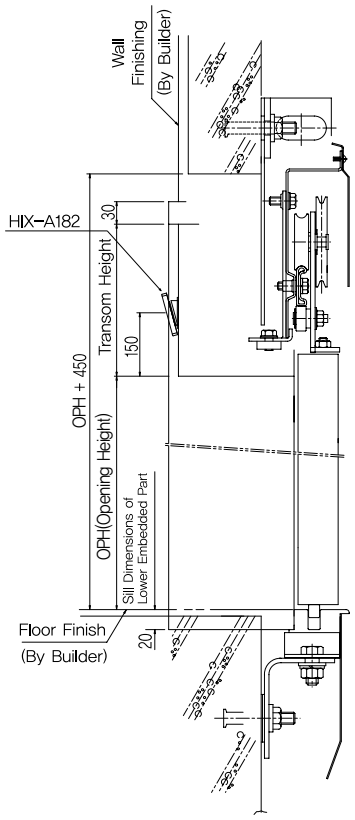
Technical Data Entrance



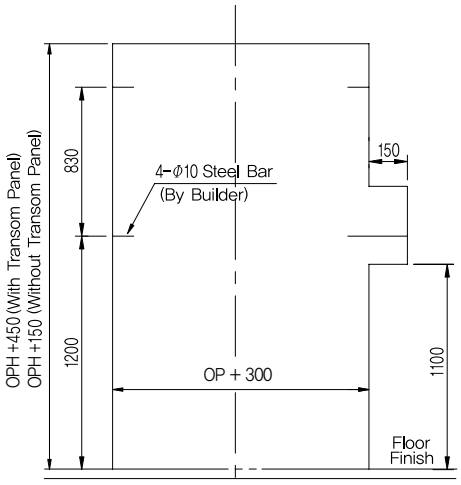
View B-B



Front View of Entrance

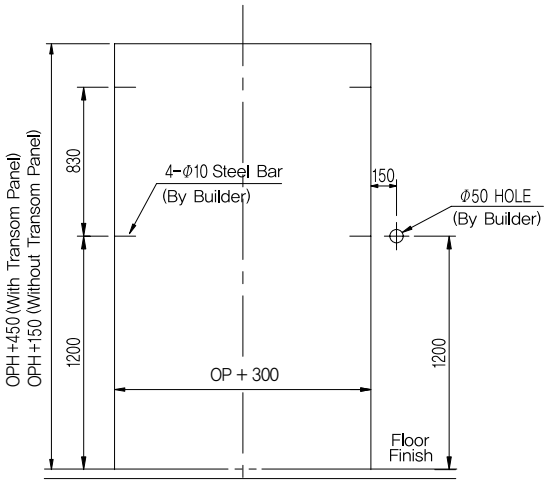


View A-A



Normal Type Button

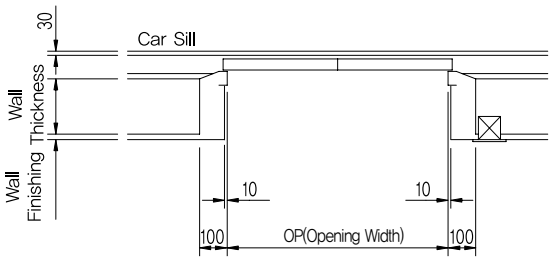
[Building Structure Plan]



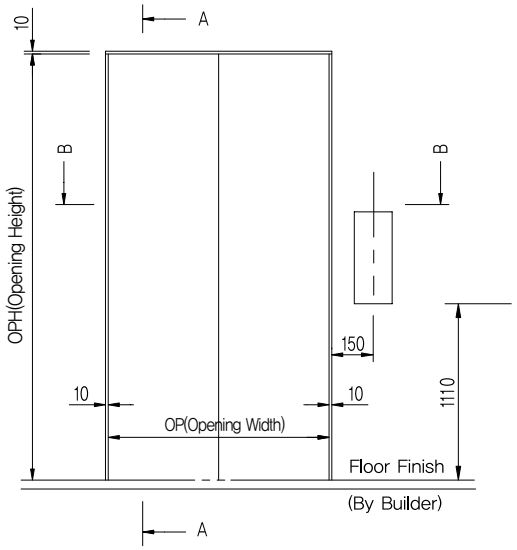
Slim Type Button

[Building Structure Plan]

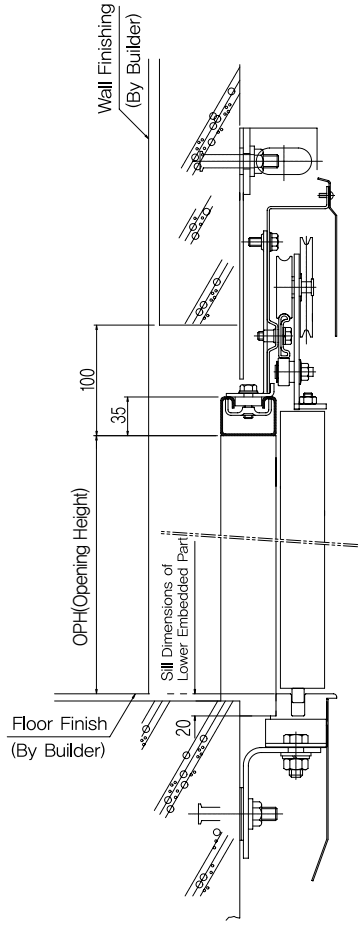
Technical Data Entrance



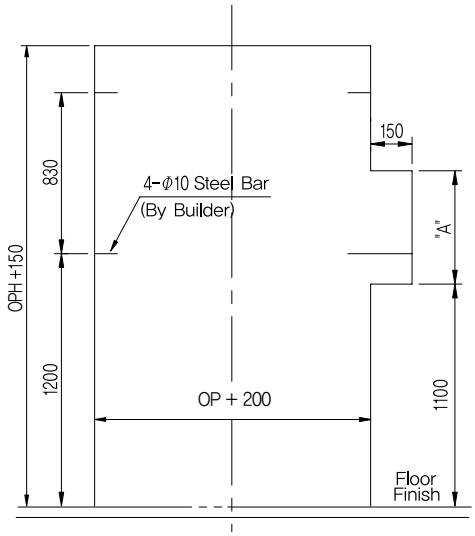
View B–B



Front View of Entrance

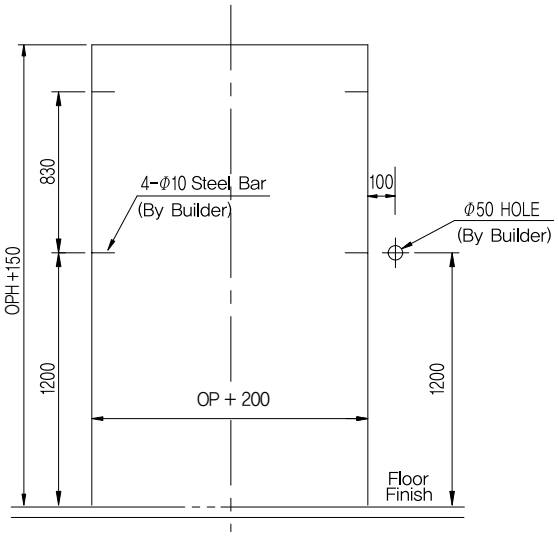


View A–A



Normal Type Button

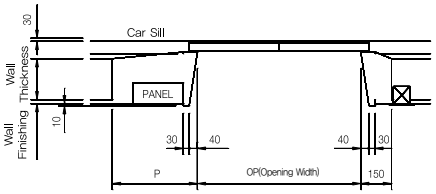
[Building Structure Plan]



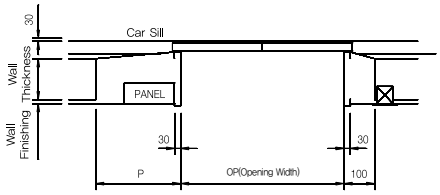
Slim Type Button

[Building Structure Plan]

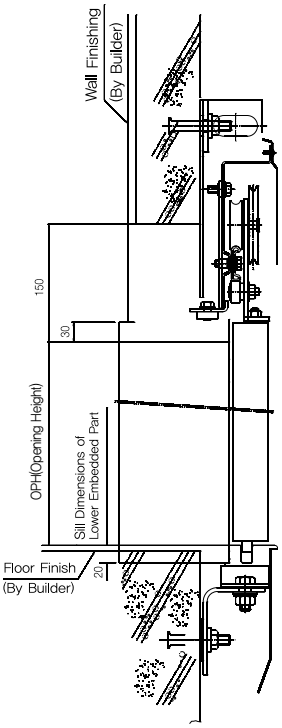
Technical Data Entrance (Top Floor)



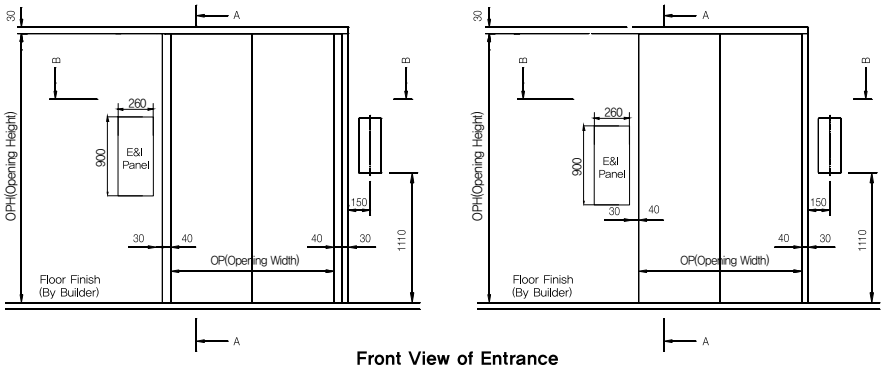
Wide Taper Type
[View B-B]



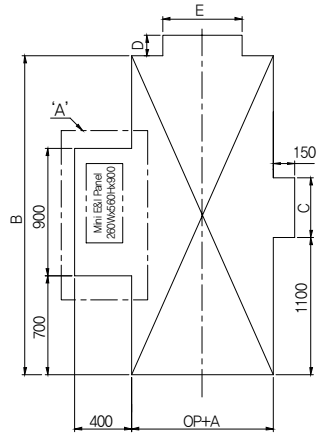
Wide Straight Type
[View B-B]



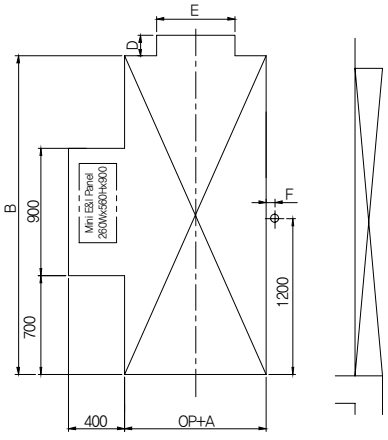
Section A-A



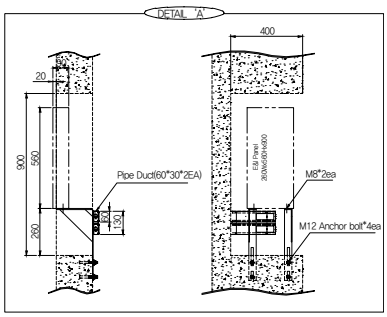
Front View of Entrance



Normal Type Button
[Building Structure Plan]

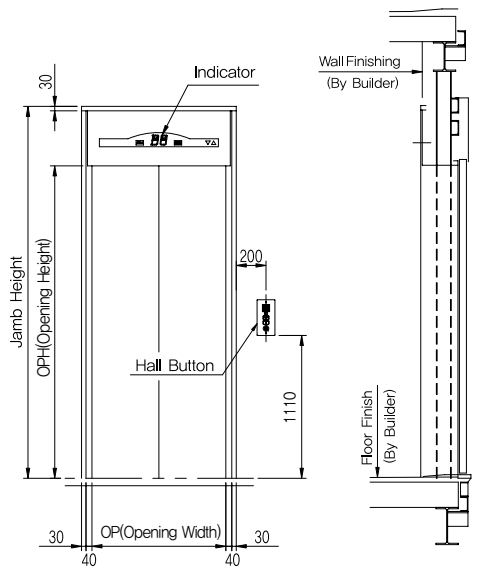


Slim Type Button
[Building Structure Plan]

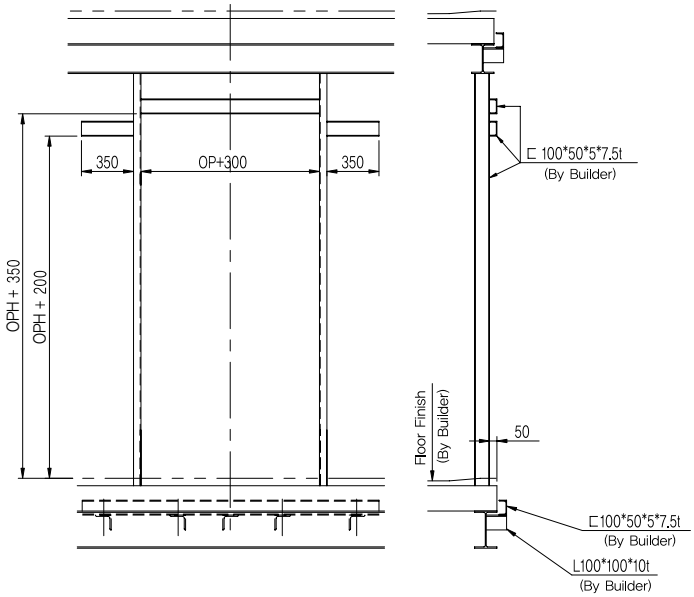


Technical Data Steel Frame Entrance

Wide Taper Jamb (Except Top Floor)

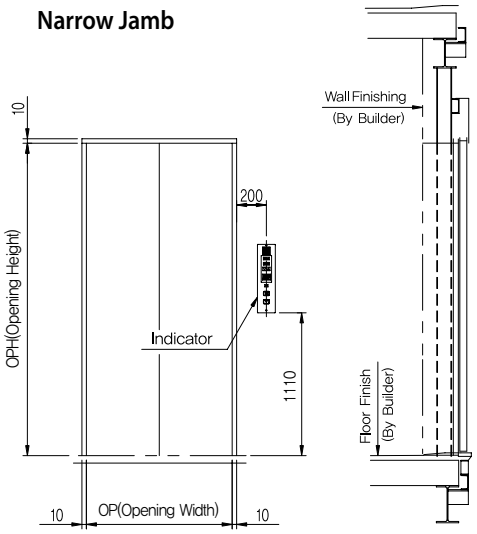


Front View of Entrance

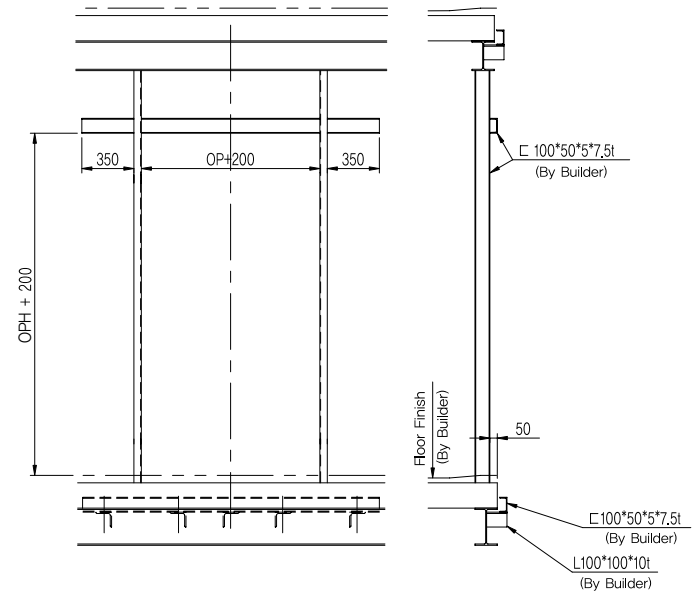


Steel Frame Diagram of Entrance

Narrow Jamb



Front View of Entrance



Steel Frame Diagram of Entrance

Technical Data

I Standard

(Unit : mm)

Speed (m/sec)	Capacity		Opening Type	Opening Width (mm)	Car Size		Hoistway Size				OH	Pit	Reation Load (N)	
	Person	Load(kg)			CW	CD	HW	HD	HW	HD			U(CAR)	V(CWT)
1.0	8	550	CLD	800	1350	1050	1900	1550	4000	1550	3800	1200	64000	52700
	9	600		800	1350	1100	1900	1600	4000	1600			76300	63900
	10	700		800	1350	1250	1900	1750	4000	1750			84100	69700
	11	750		800	1350	1350	1900	1750	4000	1750			86000	70500
	13	900		900	1550	1350	2100	1750	4400	1750			101100	82600
	15	1000		900	1600	1450	2150	1800	4500	1800			109100	88500
	17	1150		1000	1800	1450	2350	1800	4900	1800			113700	90000
	20	1350		1000	1800	1650	2550	2000	5300	2000	4150	1200	142800	115000
	24	1600		1100	2000	1700	2750	2050	5700	2050			155300	122400
	27	1800		1100	2200	1700	2950	2050	6100	2050			164200	127200
	30	2000		1100	2200	1850	2950	2300	6100	2300			170500	129400
1.5	8	550	CLD	800	1350	1050	1900	1550	4000	1550	3900 /4150	1300	64000	52700
	9	600		800	1350	1100	1900	1600	4000	1600			76300	63900
	10	700		800	1350	1250	1900	1750	4000	1750			84100	69700
	11	750		800	1350	1350	1900	1750	4000	1750			86000	70500
	13	900		900	1550	1350	2100	1750	4400	1750			101100	82600
	15	1000		900	1600	1450	2150	1800	4500	1800			109100	88500
	17	1150		1000	1800	1450	2350	1800	4900	1800			113700	90000
	20	1350		1000	1800	1650	2550	2000	5300	2000	4300 /4400	1300	142800	115000
	24	1600		1100	2000	1700	2750	2050	5700	2050			155300	122400
	27	1800		1100	2200	1700	2950	2050	6100	2050			164200	127200
	30	2000		1100	2200	1850	2950	2300	6100	2300			170500	129400
1.75	8	550	CLD	800	1350	1050	1900	1550	4000	1550	4000/ 4200	1350	64000	52700
	9	600		800	1350	1100	1900	1600	4000	1600			76300	63900
	10	700		800	1350	1250	1900	1750	4000	1750			84100	69700
	11	750		800	1350	1350	1900	1750	4000	1750			86000	70500
	13	900		900	1550	1350	2100	1750	4400	1750			101100	82600
	15	1000		900	1600	1450	2150	1800	4500	1800			109100	88500
	17	1150		1000	1800	1450	2350	1800	4900	1800			113700	90000
	20	1350		1000	1800	1650	2550	2000	5300	2000	4350 /4450	1350	142800	115000
	24	1600		1100	2000	1700	2750	2050	5700	2050			155300	122400
	27	1800		1100	2200	1700	2950	2050	6100	2050			164200	127200
	30	2000		1100	2200	1850	2950	2300	6100	2300			170500	129400

(Unit : mm)

Speed (m/sec)	Capacity		Opening Type	Opening Width (mm)	Car Size		Hoistway Size				OH	Pit	Reation Load (N)	
	Person	Load(kg)			CW	CD	HW	HD	HW	HD			U(CAR)	V(CWT)
1.0	8	550	TLD	800	1100	1250	1700	1750	3600	1750	3800	1200	64000	52700
	9	600		800	1100	1350	1700	1850	3600	1850			76300	63900
	10	700		800	1100	1500	1700	2000	3600	2000			84100	69700
	11	750		900	1200	1450	1800	1950	3800	1950			86000	70500
	13	900		900	1200	1700	1800	2200	3800	2200			101100	82600
	15	1000		900	1250	1800	1850	2300	3900	2300			109100	88500
	17	1150		1000	1300	1950	1900	2450	4000	2450			113700	90000
	20	1350		1000	1300	2200	2100	2700	4400	2700	4150	1200	142800	115000
	24	1600		1100	1450	2300	2250	2800	4700	2800			155300	122400
	27	1800		1100	1600	2300	2400	2800	5000	2800			164200	127200
	30	2000		1100	1700	2350	2500	2850	5200	2850			170500	129400
1.5	8	550	TLD	800	1100	1250	1700	1750	3600	1750	3900 /4150	1300	64000	52700
	9	600		800	1100	1350	1700	1850	3600	1850			76300	63900
	10	700		800	1100	1500	1700	2000	3600	2000			84100	69700
	11	750		900	1200	1450	1800	1950	3800	1950			86000	70500
	13	900		900	1200	1700	1800	2200	3800	2200			101100	82600
	15	1000		900	1250	1800	1850	2300	3900	2300			109100	88500
	17	1150		1000	1300	1950	1900	2450	4000	2450			113700	90000
	20	1350		1000	1300	2200	2100	2700	4400	2700	4300 /4400	1300	142800	115000
	24	1600		1100	1450	2300	2250	2800	4700	2800			155300	122400
	27	1800		1100	1600	2300	2400	2800	5000	2800			164200	127200
	30	2000		1100	1700	2350	2500	2850	5200	2850			170500	129400
1.75	8	550	TLD	800	1100	1250	1700	1750	3600	1750	4000/ 4200	1350	64000	52700
	9	600		800	1100	1350	1700	1850	3600	1850			76300	63900
	10	700		800	1100	1500	1700	2000	3600	2000			84100	69700
	11	750		900	1200	1450	1800	1950	3800	1950			86000	70500
	13	900		900	1200	1700	1800	2200	3800	2200			101100	82600
	15	1000		900	1250	1800	1850	2300	3900	2300			109100	88500
	17	1150		1000	1300	1950	1900	2450	4000	2450			113700	90000
	20	1350		1000	1300	2200	2100	2700	4400	2700	4350 /4450	1350	142800	115000
	24	1600		1100	1450	2300	2250	2800	4700	2800			155300	122400
	27	1800		1100	1600	2300	2400	2800	5000	2800			164200	127200
	30	2000		1100	1700	2350	2500	2850	5200	2850			170500	129400

Note CH=2428 is standard.
min OH, min Pit : If A/B, A is for rise < 45 m and B for rise >= 45 m.

Technical Data

EN Code

(Unit : mm)

Speed (m/sec)	Capacity		Opening Type	Opening Width (mm)	Car Size		Hoistway Size				OH	Pit	Reation Load (N)	
	Person	Load(kg)			CW	CD	HW	HD	HW	HD			U(CAR)	V(CWT)
1.0	7	525	CLD	800	1300	1050	1950	1600	4100	1600	3800	1200	64000	52700
	8	630		800	1350	1100	1950	1650	4100	1650			76300	63900
	9	675		800	1350	1250	1950	1800	4100	1800			84100	69700
	10	800		800	1350	1350	1950	1800	4100	1800			86000	70500
	12	900		900	1550	1350	2150	1800	4500	1800			101100	82600
	13	1000		900	1600	1450	2200	1850	4600	1850			109100	88500
	15	1200		1000	1800	1450	2400	1850	5000	1850			113700	90000
	18	1350		1000	1800	1650	2600	2050	5400	2050	4150	1200	142800	115000
	21	1600		1100	2000	1700	2800	2100	5800	2100			155300	122400
	24	1800		1100	2200	1700	3000	2100	6200	2100			164200	127200
	26	2000		1100	2200	1850	3000	2350	6200	2350			170500	129400
1.5	7	525	CLD	800	1300	1050	1950	1600	4100	1600	3900 /4150	1300	64000	52700
	8	630		800	1350	1100	1950	1650	4100	1650			76300	63900
	9	675		800	1350	1250	1950	1800	4100	1800			84100	69700
	10	800		800	1350	1350	1950	1800	4100	1800			86000	70500
	12	900		900	1550	1350	2150	1800	4500	1800			101100	82600
	13	1000		900	1600	1450	2200	1850	4600	1850			109100	88500
	15	1200		1000	1800	1450	2400	1850	5000	1850			113700	90000
	18	1350		1000	1800	1650	2600	2050	5400	2050	4300 /4400	1300	142800	115000
	21	1600		1100	2000	1700	2800	2100	5800	2100			155300	122400
	24	1800		1100	2200	1700	3000	2100	6200	2100			164200	127200
	26	2000		1100	2200	1850	3000	2350	6200	2350			170500	129400
1.75	7	525	CLD	800	1300	1050	1950	1600	4100	1600	4000/ 4200	1350	64000	52700
	8	630		800	1350	1100	1950	1650	4100	1650			76300	63900
	9	675		800	1350	1250	1950	1800	4100	1800			84100	69700
	10	800		800	1350	1350	1950	1800	4100	1800			86000	70500
	12	900		900	1550	1350	2150	1800	4500	1800			101100	82600
	13	1000		900	1600	1450	2200	1850	4600	1850			109100	88500
	15	1200		1000	1800	1450	2400	1850	5000	1850			113700	90000
	18	1350		1000	1800	1650	2600	2050	5400	2050	4350 /4450	1350	142800	115000
	21	1600		1100	2000	1700	2800	2100	5800	2100			155300	122400
	24	1800		1100	2200	1700	3000	2100	6200	2100			164200	127200
	26	2000		1100	2200	1850	3000	2350	6200	2350			170500	129400

(Unit : mm)

Speed (m/sec)	Capacity		Opening Type	Opening Width (mm)	Car Size		Hoistway Size				OH	Pit	Reation Load (N)	
	Person	Load(kg)			CW	CD	HW	HD	HW	HD			U(CAR)	V(CWT)
1.0	7	525	TLD	800	1100	1250	1700	1750	3600	1750	3800	1200	64000	52700
	8	630		800	1100	1350	1700	1850	3600	1850			76300	63900
	9	675		800	1100	1500	1700	2000	3600	2000			84100	69700
	10	800		900	1200	1450	1800	1950	3800	1950			86000	70500
	12	900		900	1200	1700	1800	2200	3800	2200			101100	82600
	13	1000		900	1250	1800	1850	2300	3900	2300			109100	88500
	15	1200		1000	1300	1950	1900	2450	4000	2450			113700	90000
	18	1350		1000	1300	2200	2100	2700	4400	2700	4150	1200	142800	115000
	21	1600		1100	1450	2300	2250	2800	4700	2800			155300	122400
	24	1800		1100	1600	2300	2400	2800	5000	2800			164200	127200
	26	2000		1100	1700	2350	2500	2850	5200	2850			170500	129400
1.5	7	525	TLD	800	1100	1250	1700	1750	3600	1750	3900 /4150	1300	64000	52700
	8	630		800	1100	1350	1700	1850	3600	1850			76300	63900
	9	675		800	1100	1500	1700	2000	3600	2000			84100	69700
	10	800		900	1200	1450	1800	1950	3800	1950			86000	70500
	12	900		900	1200	1700	1800	2200	3800	2200			101100	82600
	13	1000		900	1250	1800	1850	2300	3900	2300			109100	88500
	15	1200		1000	1300	1950	1900	2450	4000	2450			113700	90000
	18	1350		1000	1300	2200	2100	2700	4400	2700	4300 /4400	1300	142800	115000
	21	1600		1100	1450	2300	2250	2800	4700	2800			155300	122400
	24	1800		1100	1600	2300	2400	2800	5000	2800			164200	127200
	26	2000		1100	1700	2350	2500	2850	5200	2850			170500	129400
1.75	7	525	TLD	800	1100	1250	1700	1750	3600	1750	4000/ 4200	1350	64000	52700
	8	630		800	1100	1350	1700	1850	3600	1850			76300	63900
	9	675		800	1100	1500	1700	2000	3600	2000			84100	69700
	10	800		900	1200	1450	1800	1950	3800	1950			86000	70500
	12	900		900	1200	1700	1800	2200	3800	2200			101100	82600
	13	1000		900	1250	1800	1850	2300	3900	2300			109100	88500
	15	1200		1000	1300	1950	1900	2450	4000	2450			113700	90000
	18	1350		1000	1300	2200	2100	2700	4400	2700	4350 /4450	1350	142800	115000
	21	1600		1100	1450	2300	2250	2800	4700	2800			155300	122400
	24	1800		1100	1600	2300	2400	2800	5000	2800			164200	127200
	26	2000		1100	1700	2350	2500	2850	5200	2850			170500	129400

Note CH=2428 is standard.
OHmin, Pit depthmin: If A/B, A is for rise < 45 m and B for rise >= 45 m.

Technical Data

Power Supply Plan

(380V)

Speed (m/sec)	Capacity		Motor Capacity (kW)	MCCB Capacity of Building (A)		Power Supply Capacity (kVA)		Lead-in Wire Size (㎟)		Earth Wire Size (㎟)		Heat Output (kcal/H)	Starting Power (kVA/set)
	Person	Load(kg)		Simplex	Duplex	Simplex	Duplex	Simplex	Duplex	Simplex	Duplex		
1.0	8	550	4.3	25	30	4.0	5.7	6	6	6	6	825	7.4
	9	600	4.3	25	30	4.4	7.9	6	6	6	6	900	8.5
	10	700	6.3	25	30	4.7	8.6	6	6	6	6	1050	8.7
	11	750	6.3	25	30	5.1	9.2	6	6	6	6	1125	9.2
	13	900	6.3	25	40	5.9	10.7	6	6	6	6	1350	10.9
	15	1000	6.3	40	50	6.5	11.9	6	10	6	6	1500	12.0
	17	1150	7.7	40	50	7.4	13.4	6	10	6	6	1725	13.0
	20	1350	10.4	40	50	8.3	15.2	10	16	6	6	2025	18.2
	24	1600	10.4	40	60	9.9	18.0	10	16	6	6	2400	18.7
	27	1800	10.4	40	75	12.6	23.0	10	16	6	6	2700	20.9
	30	2000	12.7	50	100	14.0	25.6	10	16	6	10	3000	23.0
1.5	8	550	7.3	25	40	6.0	10.9	6	6	6	6	1238	12.5
	9	600	7.3	25	40	6.5	11.9	10	10	6	6	1350	13.5
	10	700	10.1	40	50	6.7	12.2	10	10	6	6	1575	14.5
	11	750	10.1	40	50	7.2	13.1	10	10	6	6	1688	15.4
	13	900	10.1	40	50	8.3	15.2	16	16	6	6	2025	18.4
	15	1000	10.1	40	60	9.3	16.9	16	16	6	6	2250	20.3
	17	1150	13.5	40	75	10.8	19.6	16	16	6	6	2588	22.0
	20	1350	18.7	40	75	12.2	22.1	16	16	6	10	3038	27.9
	24	1600	18.7	50	100	14.4	26.2	16	16	6	10	3600	32.6
	27	1800	18.7	50	125	19.0	34.5	16	16	6	10	4050	36.4
	30	2000	20.3	60	125	21.1	38.3	16	16	6	10	4500	40.1
1.75	8	550	7.3	25	40	7.0	12.7	10	10	6	6	1444	14.9
	9	600	7.3	25	50	7.6	13.9	16	16	6	6	1575	16.1
	10	700	10.1	40	50	7.8	14.2	16	16	6	6	1838	17.3
	11	750	10.1	40	50	8.4	15.3	16	16	6	6	1969	18.4
	13	900	10.1	40	60	9.7	17.7	16	16	6	6	2363	22.0
	15	1000	10.1	40	75	10.8	19.7	16	16	6	6	2625	24.2
	17	1150	13.5	40	75	12.6	22.9	16	16	6	10	3019	26.3
	20	1350	18.7	50	100	14.2	25.8	16	16	6	10	3544	33.3
	24	1600	18.7	60	100	16.8	30.6	16	16	6	10	4200	37.8
	27	1800	18.7	60	125	18.9	34.4	16	16	6	10	4725	42.1
	30	2000	20.3	60	125	21.6	39.3	16	16	6	10	5250	46.5

Technical Data

Technical Features

I Operation Functions

● Standard ○ Option

Feature	Description	
Attendant Operation	The operating mode of an elevator can be changed from the normal automatic operation to the attendant service by an attendant switch.	●
Independent Operation	Key switch in the car operating panel will cancel any existing car calls and hold the door open at the landing position. During independent operation, the car will respond only to car calls.	●
Back-up operation	When the electrical transmission device between the hall call and control panel begins to operate in an abnormal condition and it lasts for some time, the elevator control device is converted to back-up operation automatically. Then, the elevator moves in sequence up and down repeatedly from top to bottom floor to service every other floor which is in normal condition.	●
Safe Drive Operation	When a car stops between floors due to mechanical malfunction, it will descend to the nearest floor at a low speed and hold the doors open after checking all safety measures.	●
Car Call Cancellation	Allows cancellation of an incorrectly registered car call. For example, if you press the button for the wrong floor, you can cancel by pressing the same floor button again.	●
Automatic Turn-Off of Car Light & Fan	Car illumination and fan are turned off automatically in case there is no hall call or car call; this saves energy.	●
Automatic Bypass	A fully-loaded car (more than 80% of rated load) bypasses hall calls in order to maintain maximum operational efficiency.	●
Overload Holding Stop (110% of rated load)	When the number of passengers exceeds the normal capacity, a buzzer sounds and the elevator remains stopped at that floor. When the excessive number of passengers disembark, the buzzer stops, the elevator doors close, and operation continues.	●
Detection of Jammed Hall Button	If a hall button is jammed mechanically, the hall call will be automatically bypassed after being served once, until the program is resolved.	●
Car Door Safety Edge	Extending the full height of the car door, this device causes the doors to return to the fully open position should the door encounter a person or obstacle while closing.	●
Micro Leveling	An automatic two way leveling device is provided to maintain the elevator car level with the landing, regardless of elevator load or direction of travel.	●
N-Plex Operation	It can control up to 4 sets of elevators to optimize allocation of hall calls.	○
Non-Stop Operation	Specific floors which are memorized in control panel can be set to disable using switch on car operating panel or in security room.	○
Parking Operation	The elevator can be automatically parked at the predetermined floor with its doors closed, and the lights and ventilation will be turned off as well.	○
VIP Operation	The specified elevator is controlled by the special call buttons provided only for VIP elevator	○
Emergency Power Operation	If normal building power supply fails and the building provides emergency power to the controller(s), one elevator at a time will proceed to the lowest landing where it will stop with doors open and with all of its power and operating circuits in an inoperative standby condition.	○
Fire Return Operation	In case of fire, a fireman can use the elevator which is stopped at the specified floor in order to support firemen for fire-fighting.	○
Firemen Operation	In case of fire, a firemen can use the elevator which is stopped at the specified floor in order to support firemen for fire-fighting.	○
Anti-nuisance Operation	In case of substantial difference between the number of calls registered on the car operating panel and actual load in the elevator, the elevator prevents unnecessary operation by cancelling all registered calls when it arrives at the nearest floor.	○
Door Nudging	When the doors remain open for more than the fixed door open time, this feature closes the doors at a reduced closing speed with the buzzer sounding.	○
Voice Synthesizer	This system provides riding passengers with audio information about car operation such as direction of travel, landing floor, etc.	○
Door Photo Sensor	The doors reverse to fully open position if the light ray unit detects an obstacle when the doors are closing.	○

Technical Data

The works below are not included in the elevator installation work and should be carried out by building contractors in accordance with our drawings, relevant international or local codes and regulations.

I Work by Others

Hoist way

- A properly framed and enclosed hoistway, including any ventilation as required by the governing code authority.
- A dry pit constructed to the elevator manufacturer's specifications to reinforce or sustain any vertical on the guide rails and impacted loads from the car and counterweight buffers.
- A metal sill angle or concrete haunch across the full width of the hoistway at each elevator landing.
- Provision of steel bars to fix jamb around the entrance of each floor.
- All cutting, including cutouts to accommodate hall singal fixtures, patching, painting of walls, floors, partitions, together with finish painting of entrance doors and frames, if required.
- Provision of entrance or ladder for pit access
- Supply and installation of fascia plate.
- Installation of emergency exits and electric wiring in blind sections of hoistway where required.
- The tolerance of perpendicular line over the whole hoistway height must not exceed ±30mm.
- A waterproof outlet and light fixture in the elevator pit area with the light switch being located adjacent the access door or ladder.
- Suitable light fixture and convenience outlet in the pit with a light switch adjacent to the access door ladder.
- The receptacles shall have protection for ground fault circuit interrupter.
- Provision of wiring between controller and building management system.
- A construction hoisting beam or hook, if required, with the correct location and size as determined by the elevator contractor for each hoistway.
- Noise insulation should be installed between machine room and adjacent residential area.

Miscellaneous

- Wiring and piping between monitoring system.
- Hoistway shall be free of dust or harmful gas.
- All electric power for lighting, tools, welding, etc during installation.
- All single phase receptacles installed in pit, and machinery spaces shall have ground fault circuit interrupter protection.
- Fire detector for fire emergency operation.
- A secured area for storage of elevator equipment and materials during installation.

The Next Generation of Elevator

MUSE™ NV

Machine Roomless Elevator