

ACCESS

ALTURA DIAMOND PRODUCT CATALOGUE



Luxury Redefined

**Altura Diamond home lift, designed for you, using gearless belt technology
Performance with style**

Smooth and silent ride. The Altura Diamond incorporates innovative cog belt technology. The gearless drive system can offer unbelievable comfort and performance.

A truly global Home lift for superior performances with speed from 0,15 up to 0,4 m/s depending on local codes and market availability.

Excellent materials and finishes.

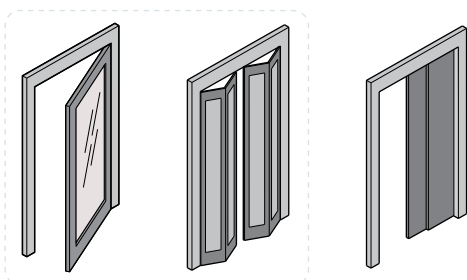
Trust our designer's choice for stylish combinations or feel free to design your own. The Altura Diamond can be customised in every details and dimensions perfectly matching your environment.



Altura Diamond performance with style

Smooth and silent ride. Excellent materials and finishes.
 The Altura Diamond incorporates innovative cog belt technology: silent and efficient. The gearless drive system can offer unbelievable comfort and performance.
 A truly global Home lift for superior performances with speed from 0,15 up to 0,4 m/s depending on local codes and market availability.

Technical compliance	European Machine directive 2006/42/EC Reference standard: EN 81-41
Drive system	Cogbelt and counterweight system driven by a gearless motor
Max speed	Europe: 0,15 m/s according to 2006/42/EC Outside EU: up to 0,4 m/s depending on countries and local codes.
Rated Load	250 - 400 kg depending on cabin size
Travel height	1100 - 18000 mm
Minimum Distance between floor (Masonry / Metal Shaft)	min. 250 mm (doors at different sides) With standard doors, net height 2000 mm min. 2200 / 2400 mm (Swing doors same side) min. 2480 / 2550 mm (Sliding doors same side)
Maximum Distance between floors	11 meters
Number of stops	Max. 6 stops per lift / 12 doors per lift
Number of doors per floor	Max. 2 doors per floor
Pit	140 mm (no pit is required when there is a threshold/ramp)
Shaft Top height (Masonry / Metal)	Folding Doors: Standard 2350 / 2450 mm Sliding Doors: Standard 2450 / 2590 mm. Elongation is possible.
Cabin control	One-touch
Landing control (on door)	One-touch with call reservation
Environment	Indoor / Outdoor (between -5°C and +40°C)
Emergency lowering	Uninterruptible Power Supply (UPS) lowering
Control voltage	24V
Power requirements	1-phase 230Vac 50/60Hz
Circuit Breaker / RCD	16A Tripping curves C / 30mA class A or B
Max power demand	1,85 kW (EU version 0,15 m/s 400 kg) 3,5 kW (Extra EU version 0,4 m/s 400 kg)



Automatic Operation with call reservation

The lift has a completely enclosed cabin for automatic "one-touch" operation. Possible configurations are:

- Cabin with Folding Doors and Swing doors at landings
- Cabin with Sliding doors and Sliding doors at landing



Altura Diamond dimensions and configurations

Our Home lift Altura Diamond is always provided with a completely enclosed cabin for automatic one-touch operation. The Altura Diamond is available in a wide range of configurations.

It is offered with standard preconfigured solutions or can be customised in every details and dimensions perfectly matching your environment.

- ◆ Sliding or Folding doors
- ◆ Application in existing shaft or with its own metallic shaft
- ◆ Indoor or Outdoor
- ◆ Front, Lateral, Opposite and Adjacent accesses

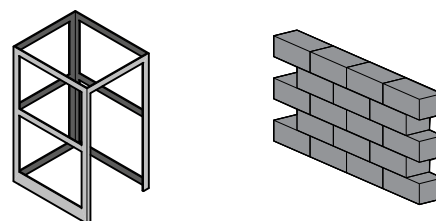
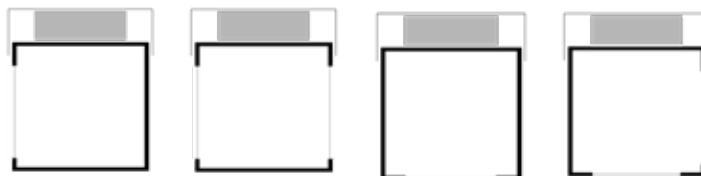
Predefined plan sizes - cabin dimensions

The most frequently requested plan sizes.

Rated load according to EN81-41 (250 kg/m²) up to 400 kg maximum, depending on cabine type, access configuration and optional features.

Plan Code	Nominal Cabin Dimensions (mm)	Nominal Floor area (m ²)	Nominal Load (kg)
P1	900 × 1200	1,08	270
P2	1000 × 800	0,80	250
P3	1000 × 1000	1,00	250
P4	1200 × 1000	1,20	300
P5	1200 × 1200	1,44	360
P6	1400 × 900	1,26	315
P7	1400 × 1000	1,40	350
P8	1400 × 1100	1,54	400

Cabins with intermediate dimensions are available.
 (*) Max load subjected to feasibility check.



Cabin Dimensions

- ☑ Altura Diamond is available in 8 different plan sizes
- ☑ Altura Diamond is also offered in customised dimensions
- ☑ The rated load depends on the platform size and the required power supply is 230 V 1-phase.

Altura Diamond cabin with sliding doors



"Europe Classic" cabin with sliding doors

Cabin sliding doors

Altura Diamond is delivered with a completely enclosed cabin with automatic telescopic doors at each access (max 2)

Accesses are protected with photocells or optionally with full height light curtains.

1

Cabin doors:

- ◆ 2 panels lateral opening or 4 panels central opening
- ◆ Skinplate, RAL painted or Stainless Steel
- ◆ Blind or Panoramic

2

Cabin wall finishes:

- ◆ Skinplate or RAL painted
- ◆ Stainless Steel AISI441 or AISI304 Satin
- ◆ Stainless Steel AISI304 Linen
- ◆ High Pressure Laminates with different styles and accent on the central panel and corners

3

Cabin / Doors height

2100 mm with net door height 2000 mm

In case of false ceiling net cabin height is reduced by 70 mm

Shaft top height (cabin with sliding doors)

- ◆ 2450 mm in case of photocells in masonry shaft
- ◆ 2500 mm in case of light curtains in masonry shaft
- ◆ 2590 mm in case of shaft structure - header diagonals
- ◆ 2610 mm in case of shaft structure - flat roof
- ◆ 2630 mm in case of shaft structure outdoor - inclined roof

Control Panel & Handrail

Control Panel is black mirror, comes with white LED backlight and can be fitted with TFT display and autodialer. Handrail can be fitted on each cabin wall at choice, including the guide side.

Optional control panel for Elegance cabins: Mirror / Gold

Dimensions

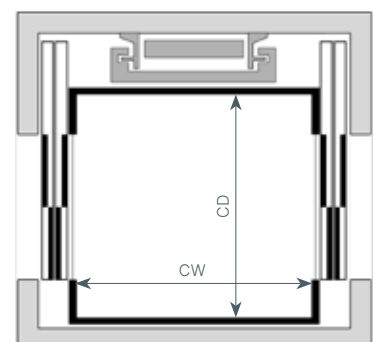
Altura Diamond with sliding doors is available in 8 standard plan sizes. Cabin dimension has been preselected according to the most frequently asked configurations and the layout is designed to maximize the net door access. Detailed drawings are included in the annex.

Intermediate dimensions for doors and plan sizes are possible.

Smallest Cabin (CWxCD): 780 mm x 650 mm

Cabin with max width (CWxCD): 1410 mm x 1135 mm

Cabin with max depth (CWxCD): 1210 mm x 1215 mm



Altura Diamond cabin with folding doors



"Europe Modern" cabin with panoramic folding doors

Cabin folding doors

Altura Diamond is delivered with a completely enclosed cabin with automatic folding doors at each access (max 2). Folding doors are a perfect fit in case of space claim to install sliding doors. At landings you will have swing doors.

1

Cabin doors:

- ◆ 4 panels central opening
- ◆ RAL painted or Stainless Steel (AISI304 Satin)
- ◆ Blind or Panoramic

2

Cabin wall finishes:

- ◆ Skinplate or RAL painted
- ◆ Stainless Steel AISI441 or AISI304 Satin
- ◆ Stainless Steel AISI304 Linen
- ◆ High Pressure Laminates with different styles and accent on the central panel and corners

3

Cabin / Doors height

2100 mm with net door height 2020 mm
In case of false ceiling net cabin height is reduced by 70 mm

Shaft top height (cabin with folding doors)

- ◆ 2350 mm in case of masonry shaft
- ◆ 2450 mm in case of shaft structure - header diagonals
- ◆ 2470 in case of shaft structure - flat roof
- ◆ 2490 in case of shaft structure outdoor - inclined roof

Control Panel & Handrail

Control Panel is black mirror, comes with white LED backlight and can be fitted with TFT display and autodialer. Handrail can be fitted on each cabin wall at choice, including the guide side.

Optional control panel for Elegance cabins: Mirror / Gold

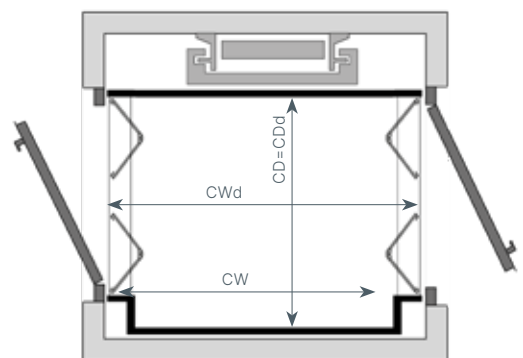
Dimensions

Altura Diamond with folding doors is available in 8 standard plan sizes. Cabin dimension has been preselected according to the most frequently asked configurations and the layout is designed to maximize the net door access. Detailed drawings are included in the annex.

Intermediate dimensions for doors and plan sizes are possible.

- Smallest Cabin (CWxCD): 750 mm x 650 mm
- Cabin with max width (CWxCD): 1410 mm x 1135 mm
- Cabin with max depth (CWxCD): 1210 mm x 1215 mm

CW/CD: Cabin dimensions measured wall to wall - recommended for public access
CWd/CDd: Cabin dimensions measured door to door - valuable for private
Rated Load based on CWxCD



Cabin - Main features

1 Control Operation Panel

The control panel is always placed on the machine side (G-side) of the cabin. It contains the destination buttons, the alarm button, the open door button and a colour display. As an option it can be configured with an autodialer system and/or a key.

It has a backlight all around the profile which emphasizes the design of the panel.

Standard: Polished Steel Black. Optional: Mirror; Gold

The location of the platform buttons and the handrail conform to EN 81-41



2 Destination buttons

Destination buttons conform to EN 81-41. The location of the buttons are within the limits in the standard, i.e. height between cabin floor and the centre line of the buttons is between 900-1100 mm.

Standard buttons are engraved with braille. Diameter of buttons in vertical panel: 37 mm

Following buttons are available:

-2, -1, 0, 1, 2, 3, 4, 5, 6, B, BG, BV, G, K, KV, P, U, E.

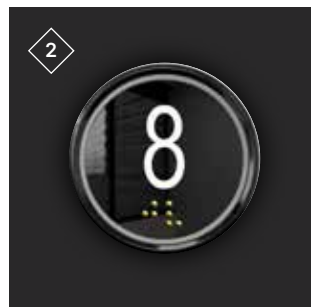
COP layout is in two columns, in case of more buttons. Finishes matching with the control panel.



3 Alarm button

A standard alarm button is always delivered with the lift. The alarm button is connected to an external alarm sounder and to an optional autodialer.

When it is pressed, a siren sounds. Keep it pressed for 3 seconds to activate the emergency call with the optional autodialer.



4 Handrail

A handrail is mandatory according to EN81-41. The height between platform floor and top edge of the handrail is between 875 - 925 mm. Minimum cross-sectional dimension is 30 mm.

Standard Cabin: Black [G-side only] or Stainless Steel
Elegance Cabin: Black [G-side only] or Stainless Steel or Gold (with Satin finish).

Handrail on a cabin wall adjacent to a cabin access could be not feasible, depending on the dimensions of the cabin jambs. A specific feasibility check will be performed at design stage.



5 External alarm sounder

The alarm sounder is mounted in the electrical cabinet.

It is connected to the alarm button and when the button is pressed the siren will give a loud signal outside the lift to attract attention in case of emergency.



6 Display and Landing indicator

TFT colour display is positioned on the control panel. It shows which floor the lift is on at the moment.

Display can also show the following information from the system:

- ◆ Direction of the lift when travelling
- ◆ Several different icon depending on the message or the status of the lift (for instance, a bell when the alarm button has been pressed, a weight symbol if the lift is overloaded)
- ◆ Error code for diagnostic
- ◆ If connected to the buildings fire alarm a symbol will be shown when alarm is activated.

The display can be ordered as an option and different audio options can be selected:

- ◆ No acoustic signal
- ◆ Acoustic signal in the cabin and at landings
- ◆ Voice announcer at cabin and acoustic signal at landings

Available languages for the voice announcer are: English,

Italian, French, German, Spanish, Dutch, Portuguese, Czech and Russian.



7 Building Integration

In combination with the Display, the lift can be connected to the building's fire alarm. In case of fire, a symbol on the display will be shown when the alarm is activated and the lift will move to a predetermined floor and park there. A specific customer's declaration is needed to integrate this option in the system.



8 Key switch on platform

Key switch placed on the control panel.
The key switch locks the Home lifts functions and prohibits unauthorized use.

Two options to choose from:

- ◆ mechanical key
- ◆ i-button

One key switch per cabin or one key switch per each stop (max 4) can be provided.
Specific configurations can be designed to allow individual access for different users



*We supply two keys per each switch.
Extra keys can be provided on request.*



*We supply one (black) i-button per each selective switch or LOP switch.
Two (black) i-buttons in case of overall cabin switch.
Extra buttons can be provided on request.
Red i-button is for installation only.*

9 Ventilation Fan

A ventilation Fan can be installed as option in the Standard Cabin. The fan will be positioned directly onto the trapdoor close to the guide side.
The fan will switch on automatically when the lift is operated and then switch off after a delayed time, exactly as it happens for the cabin light.

An optional fan button can be added to the COP in order to switch OFF/ON manually the fan.

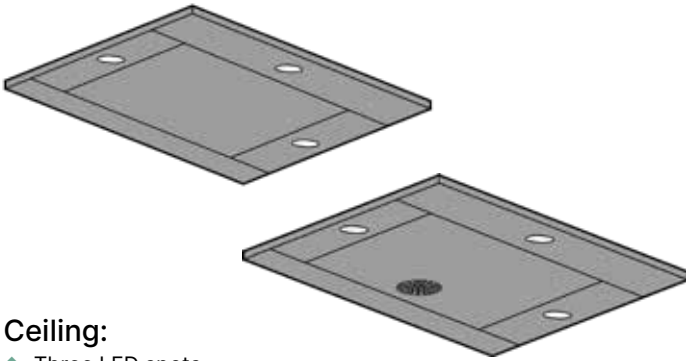
There are two operation modes that can be set in the mainboard.

"Full Manual": There is no logic. The button is a conventional on/off switch. (If not pushed off, fan stays on independently from the status of the lift).

"Manual": Automatic on/off logic is maintained. In addition, you can use the button to switch off/on the fan when the lift is operated. This is the standard setting when the lift is delivered.

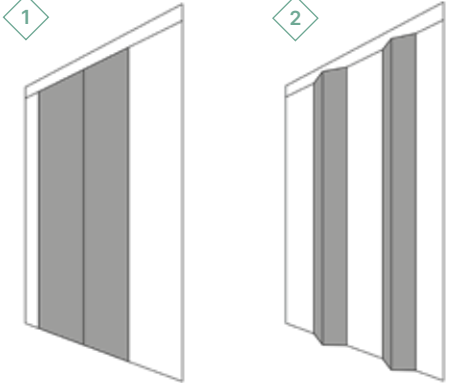


Standard Cabin - Layout



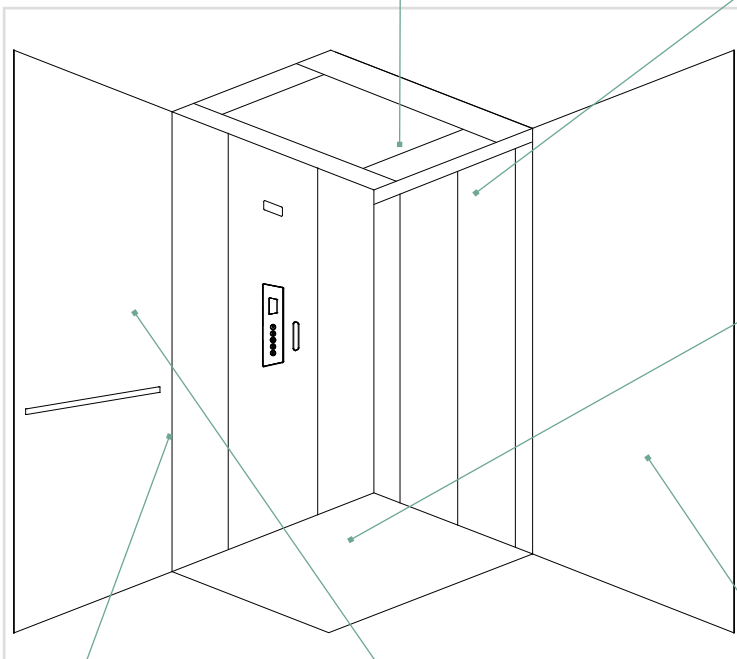
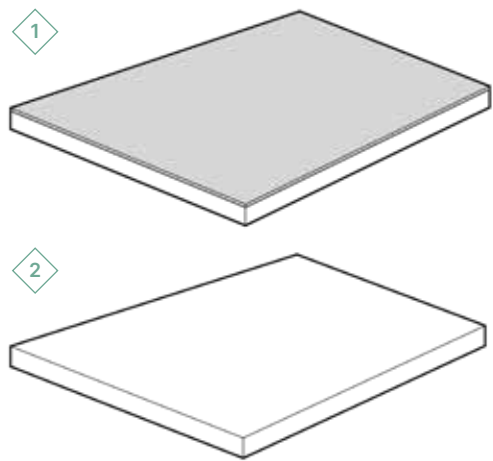
Ceiling:

- ◆ Three LED spots
- ◆ Same finish as cabin walls
- ◆ Optional ventilation Fan



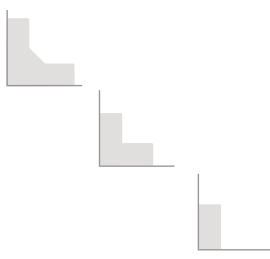
Access Side:

- ◆ Sliding door (1)
- ◆ Folding door (2)

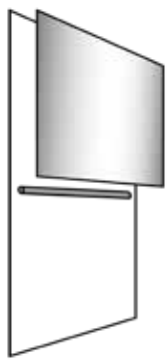
Flooring:

- ◆ At choice from our catalogue (1)
- ◆ Supplied without vinyl [3 mm recess] (2)



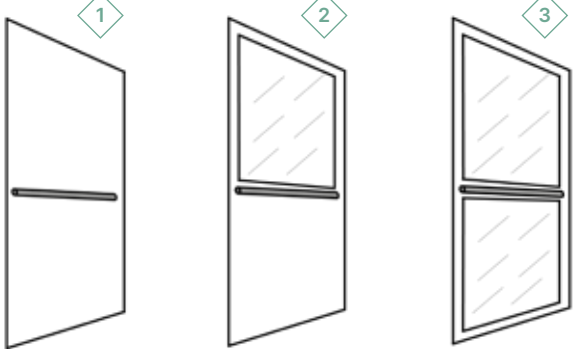
Cabin Corners:

Corners between walls might have different shapes depending on layout and dimensions. Please refer to annex DGM for details



Mirror for cabin wall:

- ◆ Half Wall
- ◆ Optional handrail



Cabin Wall:

Blind Wall (1) Half Panoramic (2) Full Panoramic (3)
Handrail not included, mandatory on Full Panoramic for Public Access solutions

Standard Cabin - Finishes

Flooring

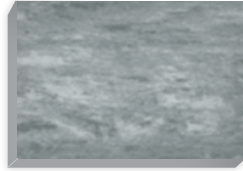
Choose between the following options for safety vinyl flooring with guaranteed life time non-slip.



White Vinyl



Sand Vinyl



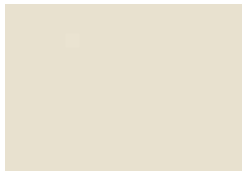
Grey Vinyl

Choose to have your lift delivered without flooring, if you want to apply your own. Max 3 mm flooring for flush top alignment.

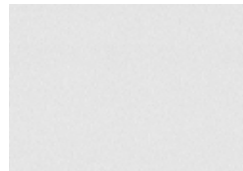
Cabin Wall

RAL Colour suggested for painted parts to match with the pre-coated steel.

PRE-COATED STEEL - PLAIN - for cabin height 1920, 2020, 2100 mm - NOT for 2200 mm



A4 (standard) - similar to RAL9010



A1 - similar to RAL9003



A13 - similar to RAL1013



N1 - similar to RAL7035



PPS - Metal Like - similar to RAL7037

Pre-coated steel is a quality material where one side of a galvanized steel sheet is industrially coated with a layer of PVC film which guarantees high aesthetic value and durability.

PRE-COATED STEEL - PPS - for cabin height 1920, 2020, 2100 mm - NOT for 2200 mm



PPS1 - similar to RAL 7035



PPS10 - similar to RAL 9003

RAL PAINT OF CHOICE



Please refer to FAQ Section

STAINLESS STEEL



Stainless Steel Satin

Pictures are purely indicative and cannot be considered controlled samples.

Sample kits are available on request.

Contents subject to change without notice

Elegance Cabin - Layout

Suspended ceiling:

- ◆ Opal (1)
- ◆ Round (2)
- ◆ Plain steel (3)
- ◆ Starry sky - Stainless Steel (4)

Access Side:

- ◆ Sliding door (1)
- ◆ Folding door (2)

At access side, jambs are in the same finish as the cabin corners.

Corners, central panel and access jambs are in the same finish and called "Accent"

Flooring:

- ◆ At choice from our catalogue (1)
- ◆ Prepared for Customer application [up to 20 mm recess; pit height increase accordingly] (2)

Cabin Corners:

Corners at access sides might have different shapes depending on layout and dimensions. Please refer to annex DGM for details.

Cabin Wall:

Blind Wall(1) Half Panoramic(2) Full Panoramic (3)
 Handrail not included - Mandatory on Full Panoramic for Public Access solutions

Mirror for cabin wall:

- ◆ Slat vertical - fixed dimensions (1)
- ◆ Half wall (2)
- ◆ Full wall (3)

Elegance Cabin - Finishes

Cabin Wall

High Pressure Laminates (HPL) with premium finishes, combining excellent performances with extraordinary tactile qualities. An ideal material for interior design from Italian master manufacturers.

LAMINATE - WOOD



W 4303 (Smooth)



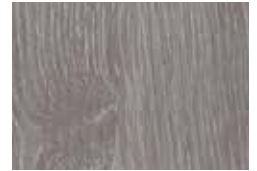
W 4367 (Smooth)



W 4515 (Rough)



W 4533 (Smooth)



W 4511 (Rough)

LAMINATE - TEXTURE



Tx 3318 (Rough)



Tx 4485 (Rough)

STAINLESS STEEL



Satin



Mirror (Polished)



Gold (Polished)

LAMINATE - CONCRETE



Cr 868 (Rough)



Cr 585 (Smooth)



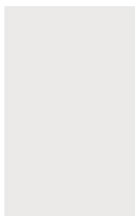
Cr 3331 (Rough)



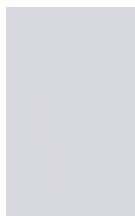
Cr 546 (Rough)

(*) Veining of the laminates is always Vertical unless otherwise specified

ACCENT - CORNERS, CENTRAL PANEL AND ACCESS JAMBS - SMOOTH FINISH



9003



7035



7012



7021



Satin



Mirror (Polished)



Gold Mirror (Polished)



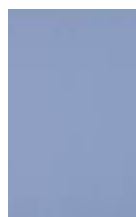
1019



3003



6011



5024

Range of finishes may vary without prior notice depending on availability.

Pictures are purely indicative and cannot be considered controlled samples. Samples kit are available on request.

Contents subject to change without notice

Flooring

Choose between the following options for safety vinyl flooring with guaranteed lifetime non-slip.

VINYL



White



Sand



Grey

STONES



White



Sand

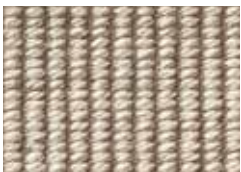


Grey

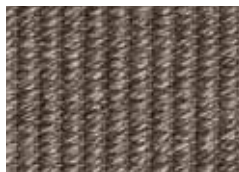


Black

CARPETS



White



Sand



Grey

Prepared for Customer application
[up to 20 mm recess; pit height
increase accordingly. Please refer to
installation drawing]

Custom

Ceiling

Elegance cabin is always provided with a counterceiling with LED light. Choose between the following options:

- 1 Opal (standard)
- 2 Plain
- 3 Round
- 4 Starry Sky



Starry sky is stainless steel satin.

The other ceilings are in steel, painted RAL9010 (white). As option can be ordered in Stainless Steel Satin



Elegance Cabin - Designer's choice

1 Modern Europe

Wall: Bright Wood 4515
Accent: Black 7021
Ceiling: Round
Flooring: Grey Vinyl
Mirror: none
Handrail: S.Steel 2 pieces (*)

2 Modern Americas

Wall: Concrete 3331
Accent: Blue 5024
Ceiling: Plain
Flooring: Grey Vinyl
Mirror: Slat vertical
Handrail: S.Steel 2 pieces (*)



Note: Pictures and veining orientation are purely indicative.



(*) Handrail S.Steel 2 pieces: for 1400 wide cabin only. Not for Cabin with folding doors at side A and/or C)

1 **Classic Europe**

Wall: Cool Wood 4511
 Accent: Beige 1019
 Ceiling: Plain
 Flooring: Sand Carpet
 Mirror: Full Wall
 Handrail: S.Steel 2 pieces (*)

2 **Classic Americas**

Wall: Texture 3318
 Accent: Light Grey 7035
 Ceiling: Plain
 Flooring: Grey Vinyl
 Full Height Panoramic wall
 Handrail: S.Steel 1 piece onto panoramic wall

3 **Classic Asia**

Wall: Dark Wood 4303
 Accent: Red 3003
 Ceiling: Plain
 Flooring: Grey Vinyl
 Mirror: Half Wall
 Handrail: S.Steel 2 pieces (*)



Note: Pictures and veining orientation are purely indicative.



(*) Handrail S.Steel 2 pieces: for 1400 wide cabin only. Not for Cabin with folding doors at side A and/or C)

1 **Natural Europe**

Wall: Warm Wood 4533
 Accent: Green 6011
 Ceiling: Plain
 Flooring: Grey Carpet
 Mirror: none
 Handrail: S.Steel 2 pieces (*)

2 **Natural Americas**

Wall: Texture 4485
 Accent: Dark Grey 7012
 Ceiling: Plain
 Flooring: Sand Carpet
 Mirror: none
 Handrail: S.Steel 2 pieces (*)

3 **Natural Asia**

Wall: Bright Wood 4367
 Accent: Green 6011
 Ceiling: Plain
 Flooring: Grey Carpet
 Mirror: none
 Handrail: S.Steel 2 pieces (*)



Note: Pictures and veining orientation are purely indicative.



(*) Handrail S.Steel 2 pieces: for 1400 wide cabin only. Not for Cabin with folding doors at side A and/or C)

1 Modern International

Wall: Concrete 868
 Accent: Steel Mirror
 Ceiling: Plain
 Flooring: White Stone
 Mirror: none
 Handrail: S.Steel 2 pieces (*)



2 Natural International

Wall: Concrete 585
 Accent: Dark Grey 7012
 Ceiling: Plain
 Flooring: White Carpet
 Mirror: none
 Handrail: S.Steel 2 pieces (*)



3 Classic International

Wall: Concrete 546
 Accent: Steel Gold
 Ceiling: Plain
 Flooring: Sand Stone
 Mirror: none
 Handrail: S.Steel 2 pieces (*)



(*) Handrail S.Steel 2 pieces: for 1400 wide cabin only. Not for Cabin with folding doors at side A and/or C)



Note: Pictures and veining orientation are purely indicative.



Dark Grey 7012



Steel Gold

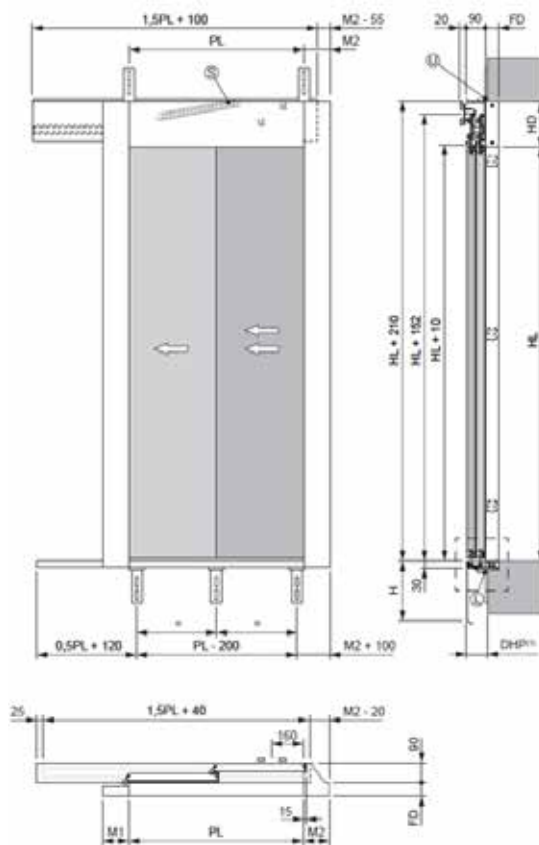
Doors

Sliding doors 2 Panels - Lateral opening

- ◆ The standard door net height (HL) is 2000 mm.
- ◆ Optionally 2100 mm for unit in masonry shaft
- ◆ The door frames are 100 mm wide on each side (M1, M2, HD).
- ◆ The door sill of the landing door is 90 mm (Cabin door 70 mm).
- ◆ The frame is 60 mm deep (FD).
- ◆ The opening can be right or left with two panels.
- ◆ The lock release has a triangular key provided with each machine.
- ◆ Standard Installation (DHP = 110 mm) is fully in the shaft.
- ◆ Recess installation is possible with DHP 30,110 mm that means recess value RL = 80,0 mm
- ◆ EI60 and EI120 – Fire & smoke proof doors can be ordered as option at landings, complying with EN 81-58. They cannot be provided with the standard LOP in the door frame. An external Call Box shall be ordered.

Door clear access (PL)	Total width (1,5 PL + 145)
600 mm	1045 mm
700 mm	1195 mm
800 mm	1345 mm
900 mm	1495 mm

Nominal dimensions in mm



Sliding doors 2 Panels - Lateral opening - Glass version

- ◆ The glass version has the same dimensions as the blind version
- ◆ The panel dimensions depend on the door clear access as shown in the picture (PL/N+20) where N is the number of panels
- ◆ The frame around the glass has standard dimensions and can be Galvanized Steel pre-painted RAL7032 or Stainless Steel AISI304 Satin finish. As option it can be painted in RAL colour at choice.
- ◆ Top and bottom: 120 mm. Lateral: 40 mm and 60 mm

Sample size – lateral open 2 panels - glass version

Door clear access (PL)	Panel size	Glass Size
600 mm	320 mm	220 mm
700 mm	370 mm	270 mm
800 mm	420 mm	320 mm
900 mm	470 mm	370 mm

Nominal dimensions in mm



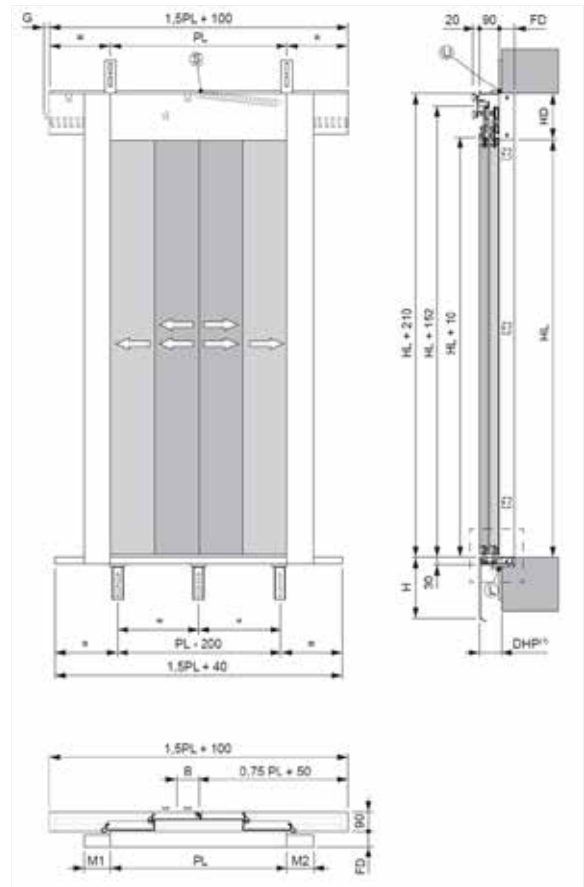
Sliding doors 4 Panels – Central opening

- ◆ The door height (HL) is 2000 mm
- ◆ The door frames have dimensions 100 mm on each side (M1, M2, HD)
- ◆ The door sill of the landing door is 90 mm (Cabin door 70 mm)
- ◆ The frame is 60 mm deep (FD)
- ◆ The opening is central with four panels.
- ◆ The lock release has a triangular key provided with each machine.
- ◆ Standard Installation is fully in the shaft (DHP = 110 mm)
- ◆ EI60 and EI120 – Fire & smoke proof doors can be ordered as option at landings, complying with EN 81-58. They cannot be provided with the standard LOP in the door frame. An external Call Box shall be ordered.

Door clear access (PL)	Total width
600 mm	1040 mm
700 mm	1165 mm
800 mm	1300 mm
900 mm	1450 mm

PL	600	650	700	≥750
G	40	30	15	0

Nominal dimensions in mm



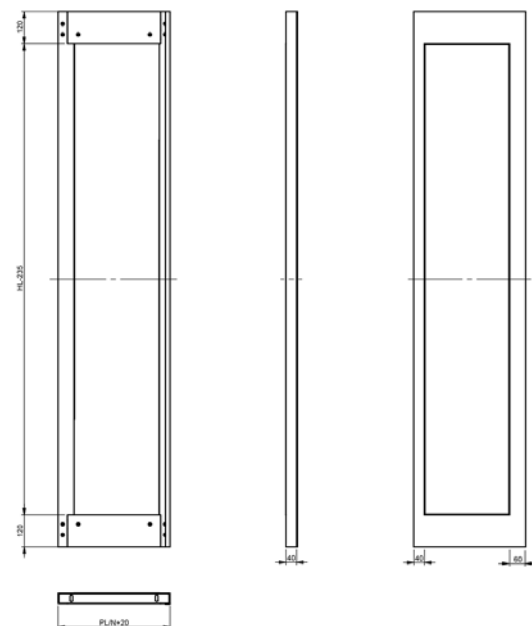
Sliding doors 4 Panels - Central opening - Glass version

- ◆ The glass version has the same dimensions as the blind version
- ◆ The panel dimensions depend on the door clear access as shown in the picture (PL/N+20) where N is the number of panels
- ◆ The frame around the glass has standard dimensions and can be Galvanized Steel prepainted RAL7032 or Stainless Steel AISI304 Satin finish.
As option can be painted in RAL colour at choice.
- ◆ Top and bottom: 120 mm. Lateral: 40 mm and 60 mm

Sample size – central open 4 panels - glass version

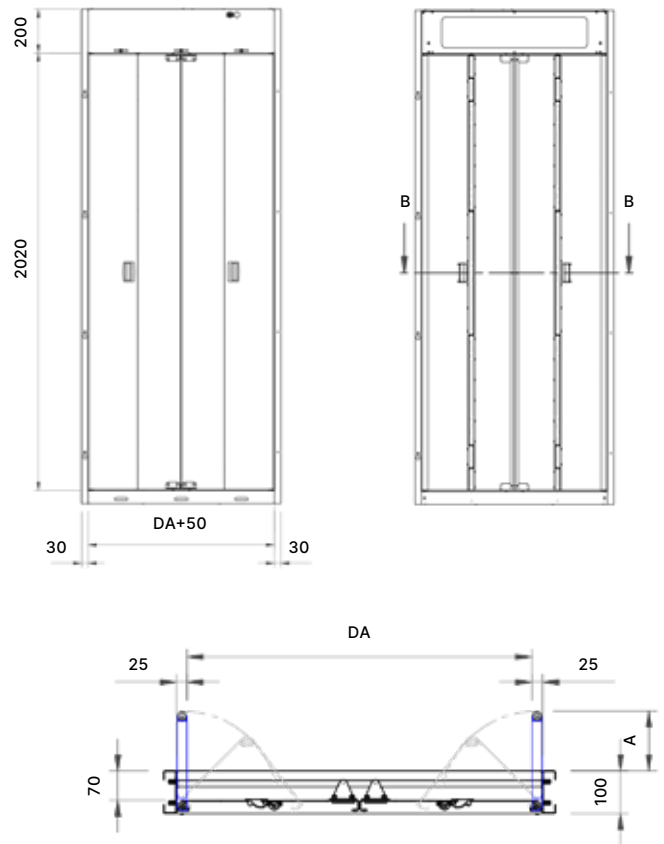
Door clear access (PL)	Panel size	Glass Size
600 mm	170 mm	70 mm
700 mm	195 mm	95 mm
800 mm	220 mm	120 mm
900 mm	245 mm	145 mm

Nominal dimensions in mm



Cabin folding doors

- ◆ Four panel central opening.
- ◆ The standard door net height is 2020 mm.
- ◆ The door sill of the landing door is 100 mm



Door clear access [DA]	A
600 mm	90 mm
700 mm	115,5 mm
800 mm	140,5 mm
900 mm	165,5 mm

“A” is the max encumbrance in the cabin with door opened
Nominal dimensions in millimeters



Cabin folding doors – Glass version

- ◆ The glass version has the same dimensions as the blind version.
- ◆ Panoramic folding doors are without handles at the inner side.
- ◆ The glass dimension depends on the door clear access as shown in the picture.
- ◆ The frame around the glass has standard dimensions and is in Stainless Steel AISI304 Satin finish. As option can be painted in RAL colour at choice.

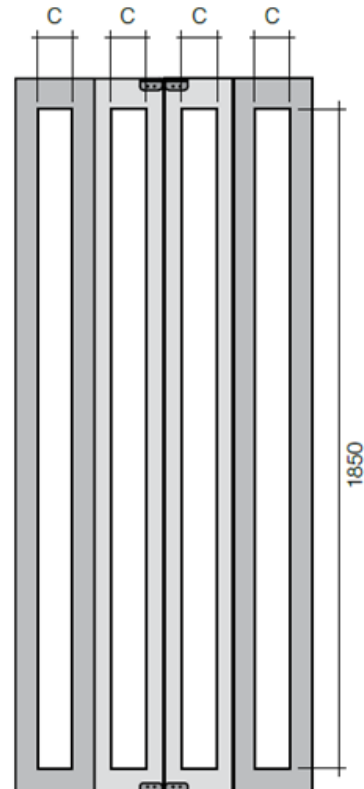


Door clear access (PL)	Glass Size B	Glass Size C
600 mm	65 mm	97 mm
700 mm	90 mm	122 mm
800 mm	115 mm	147 mm
900 mm	140 mm	171 mm

Pictures for door height 2020 mm
Nominal dimensions in millimeters

B = Door clear access/4 - 85

C = Door clear access/4 - 53



Swing Landing Doors

General information

The landing doors installed at each landing are made of steel. Doors can be blind or panoramic.

All doors are painted in RAL 9010 (White) but can be as an option

- ◆ painted in any RAL colour
- ◆ covered in stainless steel satin finish (AISI 441 or 304 or 316)

The door frame is in the same finish as the door.

Panoramic doors have a safety glass 10/11 mm thick. Standard is with transparent glass.

Optional: Smokey Grey, Smokey Satin, Opaline or Half Reflecting glass.

The profiles around the glass are made of aluminium. The profiles can be painted in any RAL colour as an option.

All doors can be left or right hinged. Doors are always delivered with door frames. It is not possible to order the door or the frame separately.



Panoramic door

Door with one glass window.

Opening widths: 600, 650, 700, 750, 800, 850, 900 mm

Opening height: 2000 mm

Different dimensions could be available on specific request.

Glass window (*): 470×1600 mm (700 mm wide door)
570×1600 mm (800 mm wide door)
670×1600 mm (900 mm wide door)

Standard:

- ◆ Door and door frame in RAL 9010 (White)
- ◆ Glass window: Transparent

Options:

- ◆ Door and door frame in other RAL colour
- ◆ Glass window: Smokey Grey, Smokey Satin, Opaline or Half Reflecting.

(*) Dimensions might slightly differ for different batches



Door frame and actual height

The door frames have dimensions 100 mm on each side
 In case of automatic door opener for doors in concrete shaft the top frame will be 140 mm instead of 100 mm.

Door net width (mm)	Door total width including frame (mm)	Door net height (mm)	Door total height including frame (mm)
600	800	2000	2100/2140
650	850	2000	2100/2140
700	900	2000	2100/2140
750	950	2000	2100/2140
800	1000	2000	2100/2140
850	1050	2000	2100/2140
900	1100	2000	2100/2140

EI120 – Fire & smoke proof door

Fire & smoke proof doors comply with EN 81-58.

- El doors are blind without any glass window.
- El doors are provided with their own specific handle
- El doors are always delivered with a frame.
- The door frames have dimensions 100 mm on each side.
- El doors >=650 mm are compatible with external door opener.
- El doors are not compatible with internal door closer.

It cannot be provided with the standard LOP in the door frame.
 An external Call Box shall be ordered.

Opening width: 600, 650, 700, 750, 800, 850, 900 mm

Opening height: 2000 mm

Standard: Door and door frame in RAL 9010 (White)

Options: Door and door frame in other RAL colour



Blind Door



Panoramic Door



Fireproof Door

Door options

Door handle

One stainless steel handle is provided as standard with each landing door.

Optionally a longer handle with modern design can be ordered

Standard "Techno": 207 mm

Optional "Modern": 330 mm Ø 20 mm



Standard doors are semi-automatic which means that they are opened manually and they close automatically. The closing speed and time cannot be adjusted.

External door opener - optional

An automatic door opener can be ordered as option. It opens and closes the door automatically. Door opening / closing time and speed are adjustable.

The cover is always painted white.

Only for doors with Clear Access ≥ 650 mm

Also applicable to EI120 Fire & Smoke Proof Doors

When having two doors with door openers on the same landing, both doors will be opened at the same time.



Internal door closer - optional

It closes the door automatically. It is built into the door frame and is invisible from the outside. Optionally, it includes the function to keep the door open until the user manually closes the door. Closing speed can be adjusted.

Only for doors with Clear Access ≥ 650 mm.



Door control

The door control is placed on the door frame of each landing door.

Optionally it is possible to have it placed away from the lift as an additional external control box.

Door control on door frame

Door control placed on the door frame on the lift.

Door faceplate

The door faceplate is Stainless Steel as standard.

The door faceplate can include:

- ◆ Call button
- ◆ Key switch
- ◆ i-button
- ◆ LCD display
- ◆ Key switch prepared for EUROKEY (Model 393/211)



Key switch / School locking

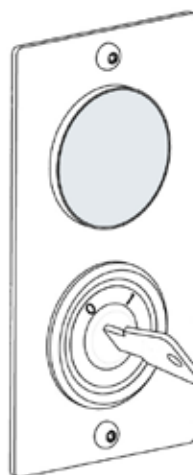
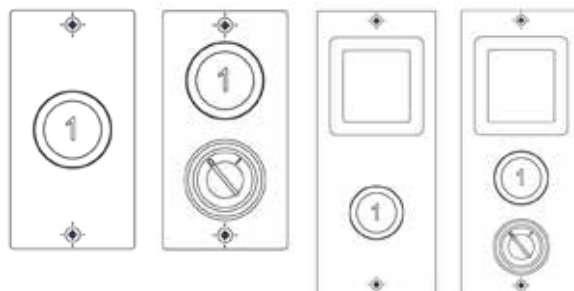
Instead of having a normal call button on the door faceplate, a key switch is possible. The user needs to have the key to be able to call and access the lift. It includes school locking function which automatically locks the door after an adjustable time.

We can provide one key switch per door only.

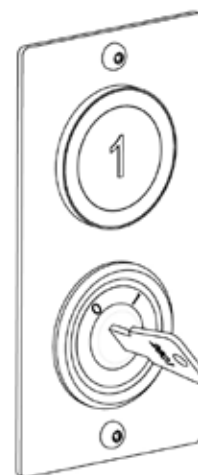
Call button

The call button comes with a background lit frame which indicates the status of the lift.

- ◆ Green light indicates that the lift is at your floor. Lit only on the floor where the platform is at the moment.
- ◆ Red light indicates that the lift is occupied. It is busy and you can't call it. In case of cabin with doors, call reservation is possible.
- ◆ The flashing light indicates that the security circuit is broken. The flashing light can also be activated by an alarm, more information is then available in the service memory.



Operation Key + lit signal



Enabling Key + Push Button

Cable or Radio control station – placed away from lift

Door control placed away from the lift in an external call box connected to the lift via a cable or wireless.

Wireless is valuable to minimize the cabin works at installation site.

Size: 130×70×55 mm without display
220×95×55 mm with display

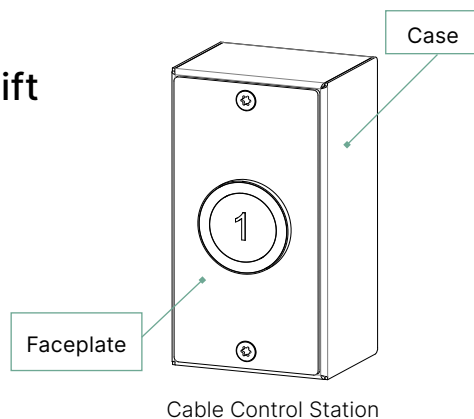
Finish: The faceplate is stainless steel satin.
The case of the call boxes for surface mounting is painted RAL9010.

The call box can be Surface Mounted or Flush Mounted.
It can be ordered in addition to the standard faceplate at landing or as remote sender from a specified floor to a different specified destination floor.
Max 1 remote sender per floor. Push button only.

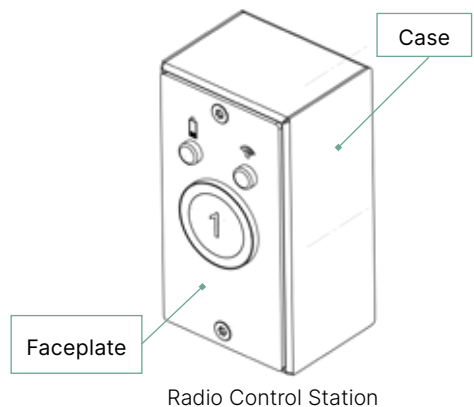
The Radio control station is available in three different configurations:

- ◆ Push Button only
- ◆ On/off Key switch + push button
- ◆ Prepared for Eurokey

The radio control station cannot be configured with a display.



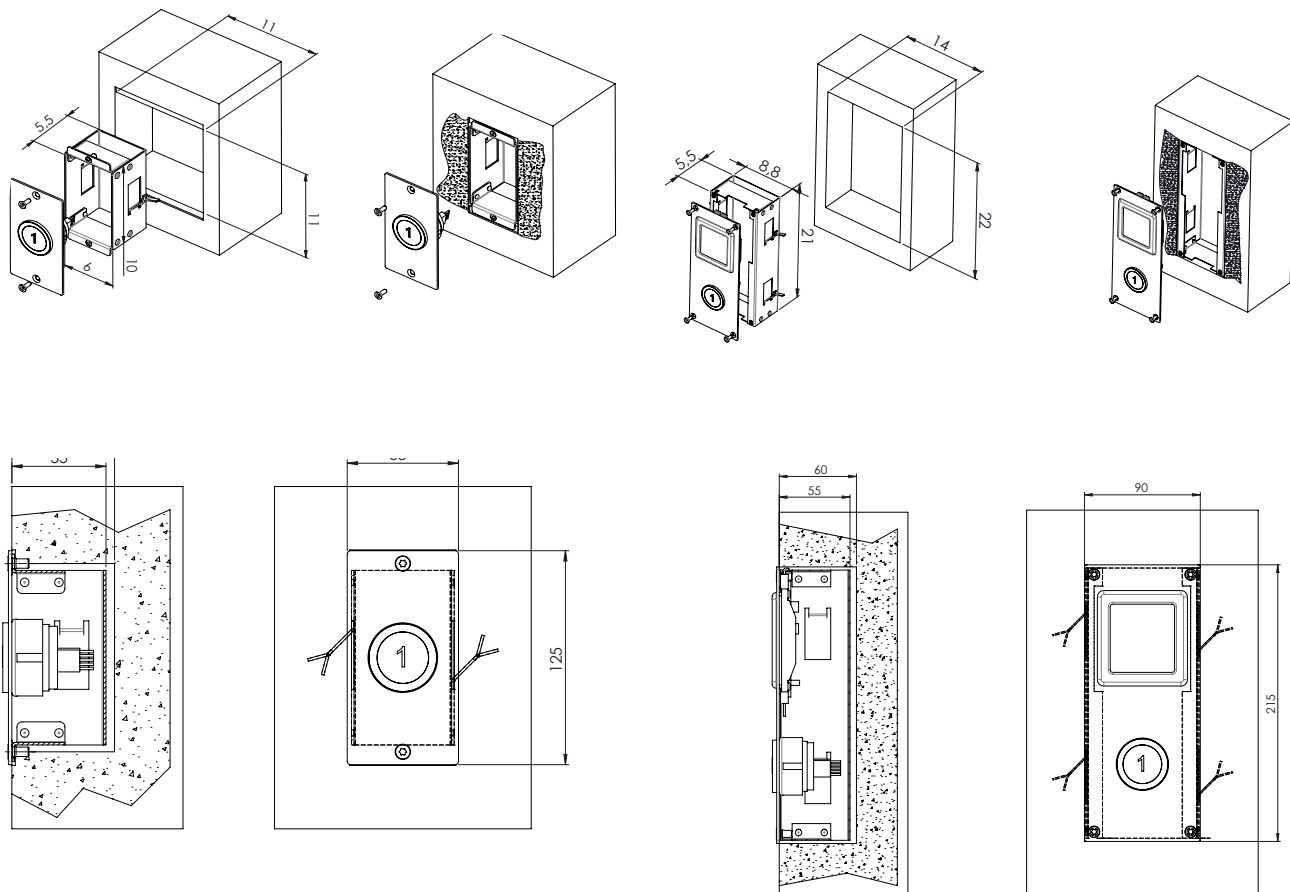
Cable Control Station



Radio Control Station

Call box for flush wall mounting

Reccomended dimensions for mounting



Landing indicator on door

Digital display positioned at the door frame. It shows which floor the lift is on at the moment.

The landing indicator can also show the following system information:

- ◆ Direction of the lift when travelling
- ◆ A bell when the alarm button has been pressed.
- ◆ A weight symbol will appear if the lift is overloaded.
- ◆ Error code for diagnostics
- ◆ Out of service state

Can be ordered as option. For Indoor application.



Shaft structure

Altura Diamond can be delivered with its own patent pending metallic shaft.

The required headroom for the shaft structure (distance from top floor to top of shaft) depends on the type of top roof and landing doors. This includes a free height of 30mm between roof and building for installation purpose.

Elongation of the shaft is possible. (up to 3000 mm).

All the four sides will be cladded by shaft panels in steel or glass. Panels can be delivered for mounting with silicon or with gasket.

The lowest and the top panels on the guide side are always provided with a round axial aerator.

Typical Required Headroom with standard cabin (2100 mm)

Model	Cabin Folding Doors + Landing Swing Doors	Cabin and landing Sliding Doors
Altura Diamond in concrete shaft	2350 mm	2450 mm (photocells) / 2500 mm (light curtains)
Altura Diamond metal shaft header diagonals - indoor	2450 mm	2590 mm
Altura Diamond metal shaft flat roof - indoor	2470 mm	2610 mm
Altura Diamond metal shaft inclined roof - outdoor	2490 mm	2630 mm

Shaft ceiling type

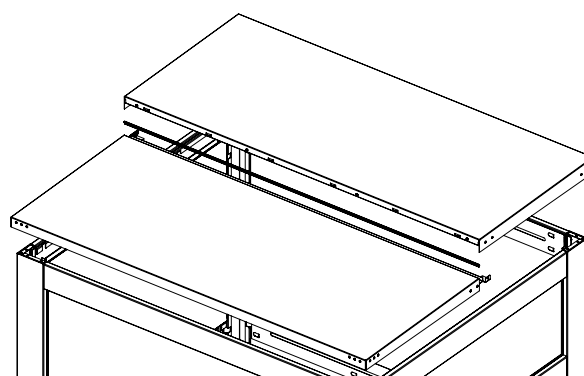
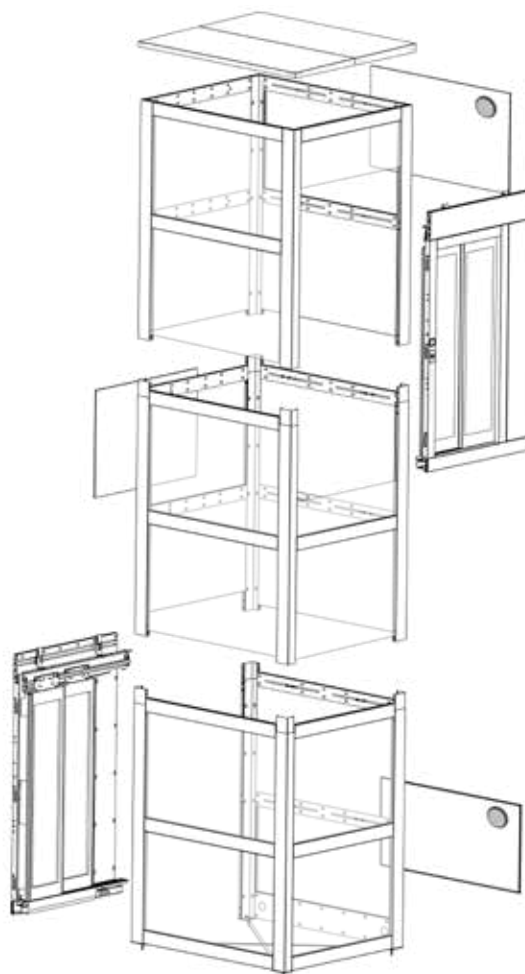
- ◆ Header diagonal (roof not covered)
- ◆ Flat roof 1 or 2 pieces, depending on dimensions
- ◆ Inclined roof 1 or 2 pieces, depending on dimensions

Ramp

If the lift is installed without a pit, a ramp is mandatory according to EN81.41. Please check compliance to local regulations.

Usually a boardwalk with low incline is executed at the building site.

Optionally we can provide a ramp 120 mm high and 1000 mm long, made of aluminium and preventing slipping.



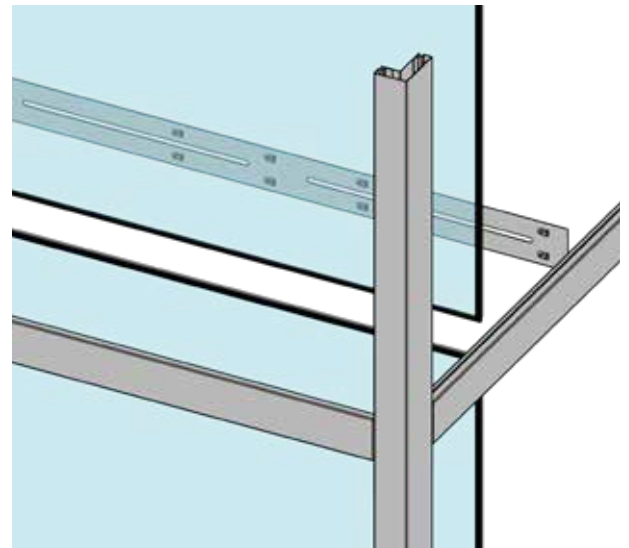
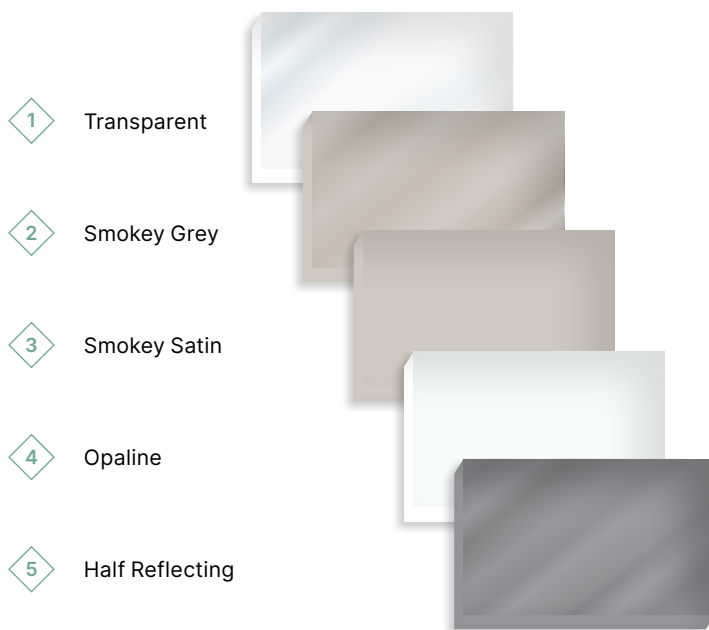
Shaft panels

Galvanized steel panels RAL painted at customer choice.

Glass panels with laminated safety glass 8/9 mm or a mix of the two on different sides of the shaft.

The perimetral gasket is suggested for faster installation.
Sealing by silicon is recommended in heavy rain environment.

Different types of glass are available:



Easy Snap System

The snap-lock fastening system permits a quick installation of the horizontal and vertical cladding frames without any additional fastening element.



Essential Panels

If your preference is for a conventional solution or higher thickness safety glasses are needed, different shaft panels are available with the following Essential features:

- Glass panels with laminated safety glass 10/11 mm.**
- Silicon instead of gasket for the shaft panels**

In case of application in heavy rain environment, panels with silicon are recommended.

Feasibility Information

Narrow to Wide

The Altura Diamond is provided with different layouts according to the cabin dimensions. The distance between guides (DBG) can vary depending on the platform/cabin width.

The feasibility diagram explains the limits for platform dimensions (CW xCD) based on technical feasibility.

As a standard rule, Altura Diamond will be designed and delivered considering the minimum nominal load according to the EN code which state 250 kg/m² unless differently specified for the destination country.

In case you would like to have an higher rated load, it's highly recommended to specify it at order stage because the calculation will change accordingly.

Feasibility diagrams for the different configurations are included in the DGM Annex to this catalog. They include formula From Cabin to Shaft and viceversa; Minimum dimensions needed for door's type.

Some limitations exist for higher travel and heavier cabins. Please refer to "Panoramic Sides" section in next pages.

Typical dimensions

In these catalogue we have preselected some typical plan sizes which represent the most frequently ordered ones, worldwide.

These are our "**Predefined plan sizes**", completely described in this catalogue. These are available as a standard solution, including the preselected door sizes and types.

It is always possible to ask for different cabin dimensions or door types and door displacements, provided these are within our feasibility and offer portfolio. Our engineers will design the lift according to your specific requirements, with extra delivery time and extra price.

We can distinguish among:

- ◆ "**Modular plan sizes**" which are designed using the standard modular elements of our metal shaft structure
- ◆ "**Customized plan sizes**" which differ from the "Predefined" or "Modular" ones for doors size, door jambs or door displacement.
- ◆ "**At measure plan sizes**" - which are instead completely customised.

Please refer to the annexes and contact us for further information.

Panoramic Sides for Cabins

For panoramic sides we intend panoramic walls and/or panoramic cabin doors. A mirror can be compared to a panoramic side.

There are no limitations in combining finishes and optional items for cabins with a floor area smaller than 1,44 m² (that means nominal load 360 kg).

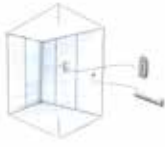
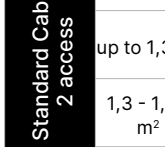

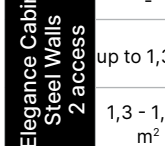

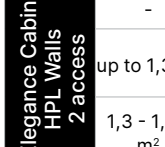
For bigger cabins, some limitations exist when combining panoramic sides with other heavy elements like rocksolid floor or external cladding panels. In these cases, a feasibility check might be needed for the configuration of additional options from our catalogue.

Please see below table and contact us for further informations.

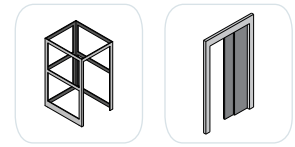
- ◆ "full availability" means there are no limitations. Any available option can be configured.
- ◆ "Weight check" means that cabins are feasible with Carpet or PVC Floor only; for the smallest cabins in the range also Rocksolid or Cladding elements might be feasible.
- ◆ "Carpet or PVC floor only" means you cannot have a Rocksolid floor or Cladding elements.
- ◆ "Feasibility check" means that in this range only the smallest cabins with no options might be eventually feasible.

Outside Europe, local regulations can state different minimum rated load with a resulting wider feasibility.

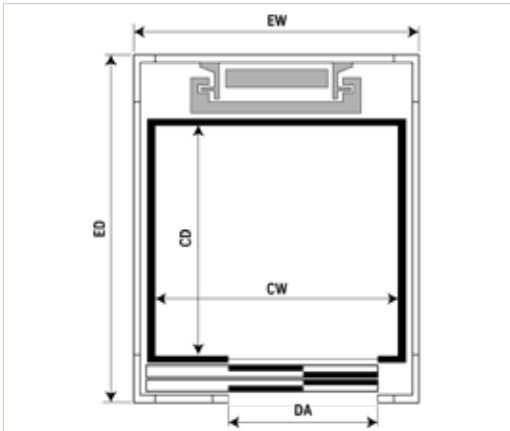
Feasibility Tables according to EN code - rated load 250 kg/m²

	Floor Area	Number of Panoramic Sides		
		1	2	3
 Standard Cabin 1 access	-	1	2	3
	up to 1,3 m ²	full availability	full availability	full availability
	1,3 - 1,44 m ²	full availability	full availability	full availability
	> 1,44 m ²	full availability	full availability	full availability
 Standard Cabin 2 access	-	1	2	3
	up to 1,3 m ²	full availability	full availability	full availability
	1,3 - 1,44 m ²	full availability	full availability	full availability
	> 1,44 m ²	full availability	full availability	Weight check
 Elegance Cabin Steel Walls 1 access	-	1	2	3
	up to 1,3 m ²	full availability	full availability	full availability
	1,3 - 1,44 m ²	full availability	full availability	full availability
	> 1,44 m ²	full availability	Weight check	Carpet or PVC floor only
 Elegance Cabin Steel Walls 2 access	-	1	2	3
	up to 1,3 m ²	full availability	full availability	full availability
	1,3 - 1,44 m ²	full availability	full availability	full availability
	> 1,44 m ²	Weight check	Carpet or PVC floor only	Feasibility Check
 Elegance Cabin HPL Walls 1 access	-	1	2	3
	up to 1,3 m ²	full availability	full availability	full availability
	1,3 - 1,44 m ²	full availability	full availability	full availability
	> 1,44 m ²	Weight check	Weight check	Carpet or PVC floor only
 Elegance Cabin HPL Walls 2 access	-	1	2	3
	up to 1,3 m ²	full availability	full availability	full availability
	1,3 - 1,44 m ²	full availability	full availability	full availability
	> 1,44 m ²	Carpet or PVC floor only	Feasibility Check	Feasibility Check

Predefined plan sizes - Shaft Structure



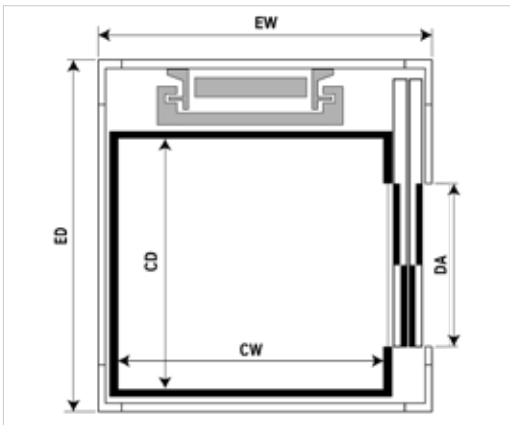
In case of no different notice doors are lateral opening two panels (2P). (4P) stands for four panel central opening. For the version with Overspeed Governor on the Counterweight please refer to the annexes



Frontal access

Configurations in accordance to the EN 81-41 in grey

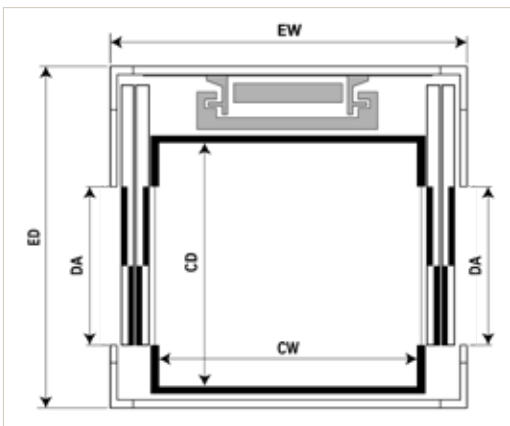
	P1	P2	P3	P4	P5	P6	P7	P8
Nominal	900×1200	1000×800	1000×1000	1200×1000	-	1400×900	1400×1000	1400×1100
CW	900	1080	1080	1210	-	1400	1400	1400
CD	1215	815	1015	1015	-	915	1015	1115
EW	1200	1300	1300	1450	-	1600	1600	1600
ED	1900	1500	1700	1700	-	1600	1700	1800
DA	600	700 (4P) 600 (2P)	700 (4P) 600 (2P)	750	-	850	850	850
Rated Load	275	250	275	310	-	325	360	395



Lateral access

Configurations in accordance to the EN 81-41 in grey

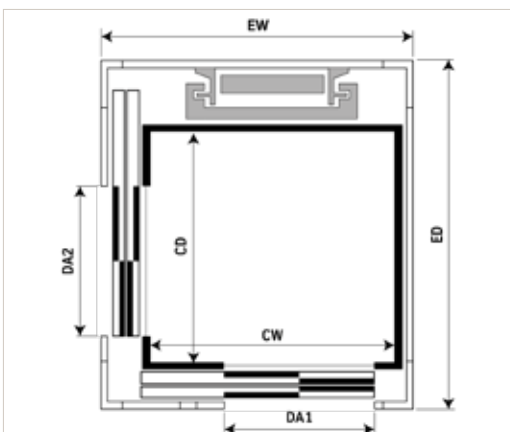
	P1	P2	P3	P4	P5	P6	P7	P8
Nominal	900×1200	1000×800	1000×1000	1200×1000	-	1400×900	1400×1000	1400×1100
CW	900	1010	1010	1210	-	1410	1410	1410
CD	1200	795	995	1015	-	900	1035	1135
EW	1300	1400	1400	1600	-	1800	1800	1800
ED	1750	1300	1500	1550	-	1400	1550	1650
DA	900	650	800	800	-	700	800	900
Rated Load	270	250	255	315	-	320	365	400



Opposite accesses

Configurations in accordance to the EN 81-41 in grey

	P1	P2	P3	P4	P5	P6	P7	P8
Nominal	900×1200	1000×800	1000×1000	1200×1000	-	1400×900	1400×1000	1400×1100
CW	890	1040	1040	1240	-	1400	1400	1400
CD	1200	795	995	1015	-	920	1035	1135
EW	1450	1600	1600	1800	-	1960	1960	1960
ED	1800	1300	1500	1550	-	1450	1550	1650
DA	900	650	800	800	-	750	800	900
Rated Load	270	250	260	325	-	325	365	400

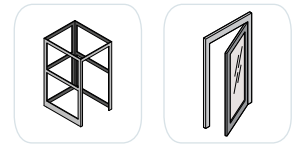


Adjacent accesses

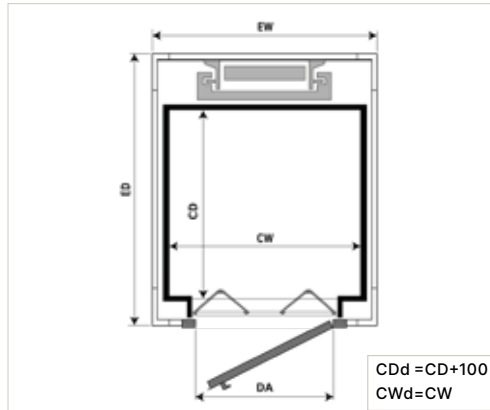
Configurations in accordance to the EN 81-41 in grey

	P1	P2	P3	P4	P5	P6	P7	P8
Nominal	900×1200	1000×800	1000×1000	1200×1000	1200×1200	1400×900	1400×1000	1400×1100
CW	910	1010	1010	1210	1210	1400	1400	1400
CD	1215	815	1015	1015	1215	915	1015	1115
EW	1300	1400	1400	1600	1600	1800	1800	1800
ED	1900	1500	1700	1700	1900	1600	1700	1800
DA1	600 (4P)	600	700	750	800 (2P) 850 (4P)	900	900	900
DA2	900	700	800	800	850 (2P) 900 (2P)	750	800	900
Rated Load	280	250	260	310	370	325	360	395

Predefined plan sizes - Shaft Structure



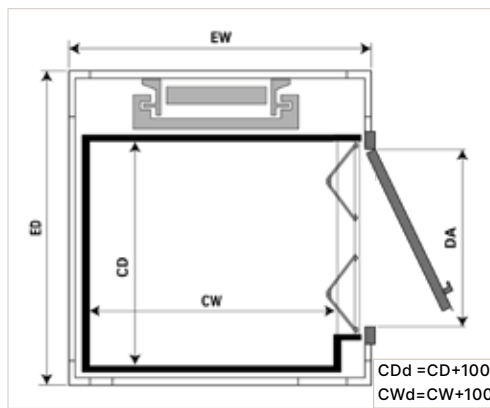
In case of measurement Door to Door (CDd and CWd - pag.5), please consider additional 100 mm for each access



Frontal access

Configurations in accordance to the EN 81-41 in grey

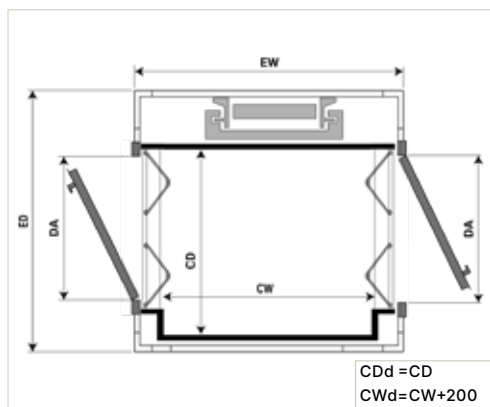
	P1	P2	P3	P4	P5	P6	P7	P8
Nominal	900×1200	1000×800	1000×1000	1200×1000	-	1400×900	1400×1000	1400×1100
CW	900	1000	1090	1200	-	1400	1400	1400
CD	1205	805	1005	1005	-	905	1005	1105
EW	1100	1200	1300	1450	-	1600	1600	1600
ED	1800	1400	1600	1600	-	1500	1600	1700
DA	700	800	900	900	-	900	900	900
Rated Load	275	250	275	305	-	320	355	390



Lateral access

Configurations in accordance to the EN 81-41 in grey

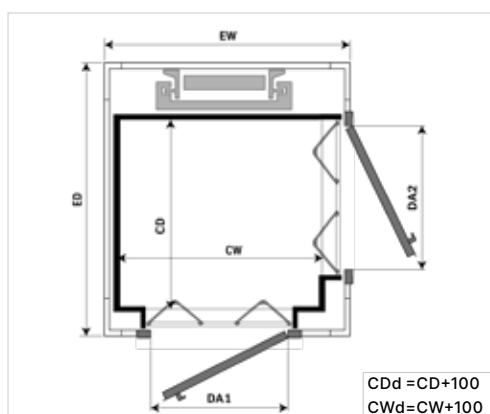
	P1	P2	P3	P4	P5	P6	P7	P8
Nominal	900×1200	1000×800	1000×1000	1200×1000	-	1400×900	1400×1000	1400×1100
CW	900	1000	1000	1200	-	1400	1400	1400
CD	1195	810	1010	1040	-	940	1040	1125
EW	1200	1300	1300	1500	-	1700	1700	1700
ED	1700	1350	1550	1550	-	1450	1550	1650
DA	900	650	850	850	-	750	850	900
Rated Load	270	250	255	315	-	330	365	395



Opposite accesses

Configurations in accordance to the EN 81-41 in grey

	P1	P2	P3	P4	P5	P6	P7	P8
Nominal	900×1200	1000×800	1000×1000	1200×1000	-	1400×900	1400×1000	1400×1100
CW	920	1020	1020	1220	-	1420	1420	1420
CD	1195	795	1085	1040	-	940	1040	1125
EW	1300	1400	1400	1600	-	1800	1800	1800
ED	1700	1300	1600	1550	-	1450	1550	1650
DA	900	650	900	850	-	750	850	900
Rated Load	275	250	280	320	-	335	370	400



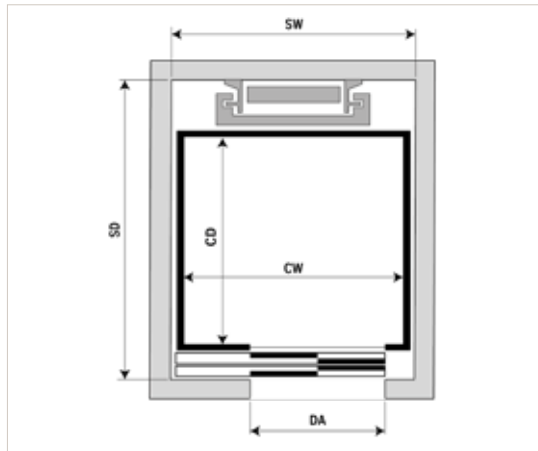
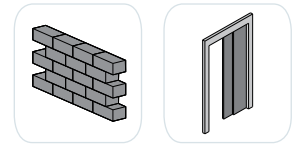
Adjacent accesses

Configurations in accordance to the EN 81-41 in grey

	P1	P2	P3	P4	P5	P6	P7	P8
Nominal	900×1200	1000×800	1000×1000	1200×1000	1200×1200	1400×900	1400×1000	1400×1100
CW	900	1000	1000	1200	1200	1400	1400	1400
CD	1205	805	1005	1005	1205	905	1005	1105
EW	1200	1300	1300	1500	1500	1700	1700	1700
ED	1800	1400	1600	1600	1800	1500	1600	1700
DA1	650	750	750	800	900	900	900	900
DA2	900	650	750	800	900	700	800	900
Rated Load	275	250	255	305	365	320	355	390

Predefined plan sizes - Concrete shaft

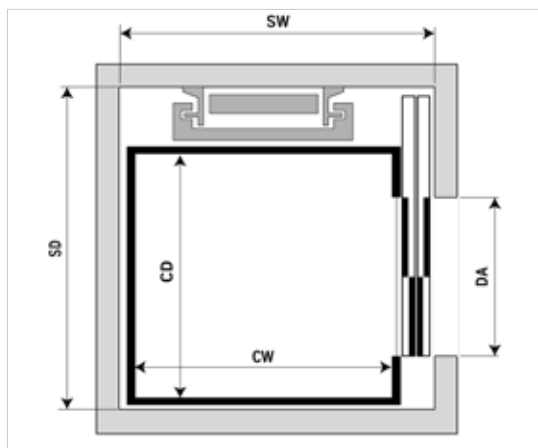
In case of no different notice doors are lateral opening two panels (2P). (4P) stands for four panel central opening.
 For the version with Overspeed Governor on the Counterweight please refer to the annexes



Frontal access

Configurations in accordance to the EN 81-41 in grey

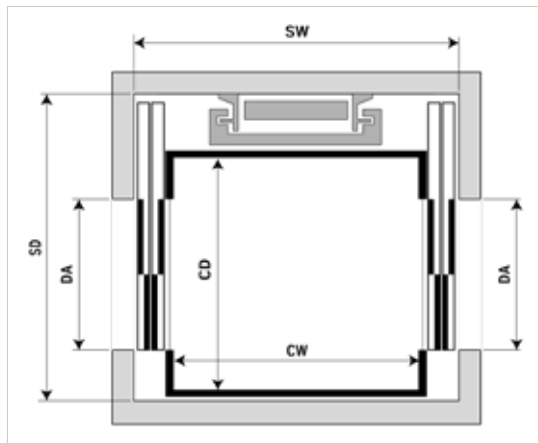
	P1	P2	P3	P4	P5	P6	P7	P8
Nominal	900×1200	1000×800	1000×1000	1200×1000	-	1400×900	1400×1000	1400×1100
CW	900	1080	1080	1210	-	1400	1400	1400
CD	1215	815	1015	1015	-	915	1015	1115
SW	1120	1220	1220	1350	-	1540	1540	1540
SD	1820	1420	1620	1620	-	1520	1620	1720
DA	600 (2P)	600 (2P) 700 (4P)	600 (2P) 700 (4P)	750	-	850	850	850
Rated Load	275	250	275	310	-	325	360	395



Lateral access

Configurations in accordance to the EN 81-41 in grey

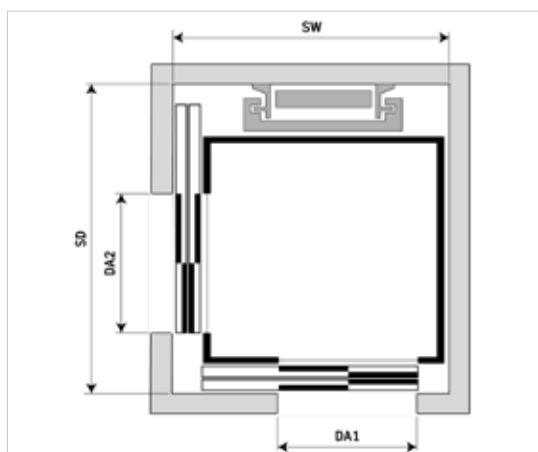
	P1	P2	P3	P4	P5	P6	P7	P8
Nominal	900×1200	1000×800	1000×1000	1200×1000	-	1400×900	1400×1000	1400×1100
CW	900	1010	1010	1210	-	1410	1410	1410
CD	1200	800	1000	1035	-	900	1035	1135
SW	1210	1320	1320	1520	-	1720	1720	1720
SD	1635	1235	1435	1470	-	1335	1470	1570
DA	900	650	800	800	-	700	800	900
Rated Load	270	250	255	310	-	320	365	400



Opposite accesses

Configurations in accordance to the EN 81-41 in grey

	P1	P2	P3	P4	P5	P6	P7	P8
Nominal	900×1200	1000×800	1000×1000	1200×1000	-	1400×900	1400×1000	1400×1100
CW	890	1040	1040	1240	-	1400	1400	1400
CD	1200	800	1000	1035	-	920	1035	1135
SW	1370	1520	1520	1720	-	1880	1880	1880
SD	1635	1235	1435	1470	-	1355	1470	1570
DA	900	650	800	800	-	750	800	900
Rated Load	270	250	260	325	-	325	365	400



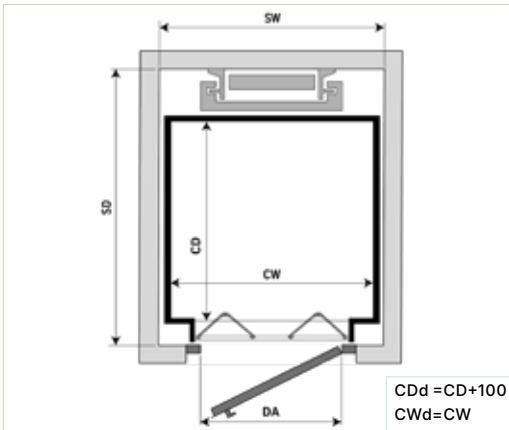
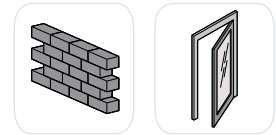
Adjacent accesses

Configurations in accordance to the EN 81-41 in grey

	P1	P2	P3	P4	P5	P6	P7	P8
Nominal	900×1200	1000×800	1000×1000	1200×1000	1200×1200	1400×900	1400×1000	1400×1100
CW	910	1010	1010	1210	1210	1400	1400	1400
CD	1215	815	1015	1015	1215	915	1015	1115
SW	1220	1320	1320	1520	1520	1710	1710	1710
SD	1820	1420	1620	1620	1820	1520	1620	1720
DA1	600 (4P)	600	700	750	850 (2P) 900 (4P)	900	900	900
DA2	900	700	800	800	850 (2P) 900 (2P)	750	800	900
Rated Load	280	250	260	310	370	325	360	395

Predefined plan sizes - Concrete shaft

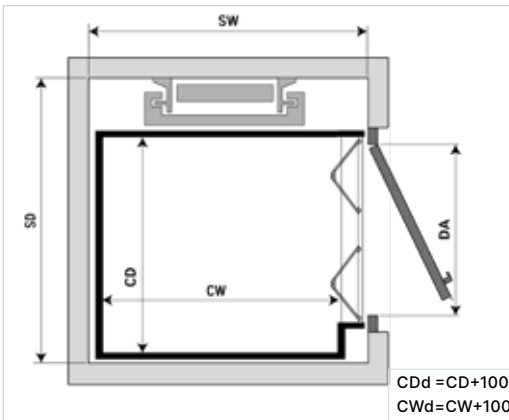
In case of measurement Door to Door (CDd and CWd - pag.5), please consider additional 100 mm for each access



Frontal access

Configurations in accordance to the EN 81-41 in grey

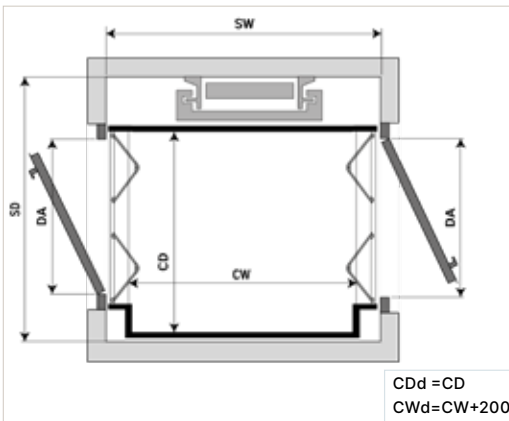
	P1	P2	P3	P4	P5	P6	P7	P8
Nominal	900×1200	1000×800	1000×1000	1200×1000	-	1400×900	1400×1000	1400×1100
CW	900	1000	1090	1200	-	1400	1400	1400
CD	1205	805	1005	1005	-	905	1005	1105
SW	1040	1140	1230	1340	-	1540	1540	1540
SD	1720	1320	1520	1520	-	1420	1520	1620
DA	700	800	900	900	-	900	900	900
Rated Load	275	250	275	305	-	320	355	390



Lateral access

Configurations in accordance to the EN 81-41 in grey

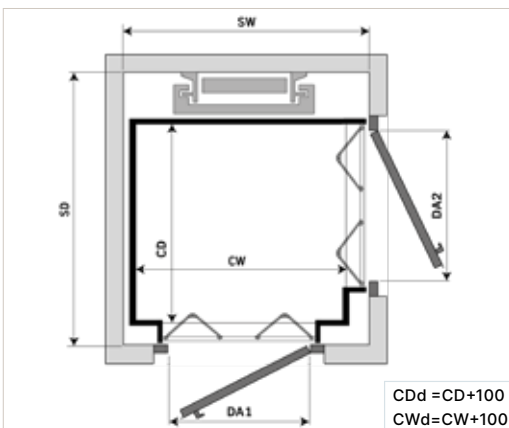
	P1	P2	P3	P4	P5	P6	P7	P8
Nominal	900×1200	1000×800	1000×1000	1200×1000	-	1400×900	1400×1000	1400×1100
CW	900	1000	1000	1200	-	1400	1400	1400
CD	1195	810	1010	1040	-	940	1040	1125
SW	1120	1220	1220	1420	-	1620	1620	1620
SD	1630	1245	1445	1475	-	1375	1475	1560
DA	900	650	850	850	-	750	850	900
Rated Load	270	250	255	315	-	330	365	395



Opposite accesses

Configurations in accordance to the EN 81-41 in grey

	P1	P2	P3	P4	P5	P6	P7	P8
Nominal	900×1200	1000×800	1000×1000	1200×1000	-	1400×900	1400×1000	1400×1100
CW	920	1020	1020	1220	-	1420	1420	1420
CD	1195	795	1085	1040	-	940	1040	1125
SW	1220	1320	1320	1520	-	1720	1720	1720
SD	1630	1230	1520	1475	-	1375	1475	1560
DA	900	650	900	850	-	750	850	900
Rated Load	275	250	280	320	-	335	370	400



Adjacent accesses

Configurations in accordance to the EN 81-41 in grey

	P1	P2	P3	P4	P5	P6	P7	P8
Nominal	900×1200	1000×800	1000×1000	1200×1000	1200×1200	1400×900	1400×1000	1400×1100
CW	900	1000	1000	1200	1200	1400	1400	1400
CD	1205	805	1005	1005	1205	905	1005	1105
SW	1120	1220	1220	1420	1420	1620	1620	1620
SD	1720	1320	1520	1520	1720	1420	1520	1620
DA1	650	750	750	800	900	900	900	900
DA2	900	650	750	800	900	700	800	900
Rated Load	275	250	255	305	365	320	355	390

Configuration for delivery

- ◆ The lift is delivered with the main parts already assembled to optimize weight and installation time.
- ◆ Electrical cables are pre-wired and prepared with connectors.
- ◆ Small parts are packaged into specific identifiable boxes.
- ◆ T-guides are already "cut to length" to reduce installation time at site.
- ◆ T-guide sections always have a maximum length smaller than 3000 mm
- ◆ Shaft elements always have a maximum length smaller than 2500 mm
- ◆ The lift is always delivered with an optimized package to reduce logistic costs and product breakage during transportation.



Electrical cabinet

The standard position of the electrical cabinet is in the shaft or integrated in the existing building, at the upper floor side to the landing door.

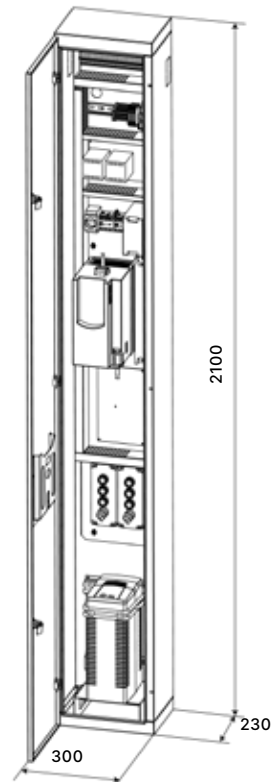
Optionally it can be positioned at the bottom floor side to the landing door or moved to a maximum distance of 5 meters from the Guide side of the lift (at bottom or top landing).

Please specify your preference at order stage.

Finishes: Standard is skinplate metal like
Option: Stainless Steel 304 Satin; RAL paint at choice

For outdoor application, we suggest to order a RAL painted cabinet and to position it in a protected area of the building or to provide "suitable rain protection" to avoid unwanted water infiltration inside the cabinet. It should not be exposed to direct rain.

Dimensions: 300 × 230 × 2100 mm



Communication & drive



Two way communication

Two way communication is mandatory according to EN81-41. Telephone landline required for standard configuration. As an option, GSM module can be added (SIM card not supplied). Choose from one of the following options.

Autodialer

Equipment for emergency calls. Integrated in the control operation panel. Dials automatically when the alarm button is kept pressed for 3 seconds. When unanswered after a predefined time, the call is automatically forwarded to the next pre-set number. The autodialer can be equipped with a GSM module.

Phone

The telephone works as a standard telephone but is intended for emergency calls only. The phone is mounted on the platform panel, usually side to the Control Panel.



Precision engineering you can trust

Gearless Motor & Cogged belts

Silent and efficient, the gearless drive system can offer unbelievable comfort and performances. Due to the double offset helix design, the cogged belts minimize noise and vibrations optimizing guidance of the belt over the pulley.

Soft start and stop.

It provides the lift with an unbelievable smooth start and stop, thank you to the state-of-the art inverter with customizable logic capability. It comes as a standard feature on all the Home lifts.

Safety is our DNA.

With its own SIL3 certified electronics, Altura Diamond sets itself apart from the crowd and beyond the mandatory in the Home lift market.

Emergency lowering

The UPS system ensures an Uninterruptible Power Source to run the lift in the case of a power cut as a standard device. When there is a power failure, you can still travel downwards and get out by yourself. It is possible to run the lift to the nearest lower level pressing a destination button.

FAQ

1. Can I have the lift painted in any colour?

Altura Diamond elements can be painted in any RAL colour. Colours are grouped according the frequency of use - in different classes with different pricing. Price level is lower for the most frequently used colours in our range. Also delivery times can differ per group.

RAL Colour Groups	Type of colours included
Group 1 High frequency	The 14 - most frequently ordered - not metallic RAL colours. This group include RAL9010 and the skinplate matching colours.
Group 2 Mid frequency	The 16 - often used - not metallic RAL colours
Group 3 Low frequency	4 Metallic colours (R06 / R07 / R09 / R10) + 44 not metallic RAL colours sometimes ordered
Any other RAL	Any other colour from the RAL chart K7 classic (year 2017). Pearl and Metal colours excluded.

RAL Colours Groups apply to all the painted components in our lift: Metal Shaft and Panels / Cabin Walls / Cabin and Landing Doors. RAL9010 is part of Group1. In other cases, it can be the standard finish included in the base price. Metallic Colours (R06 / R07 / R09 / R10) are available for Metal shaft and Landing Doors only.

Painting for Shaft, Doors, Cabin is Coarse Texture, visual gloss. Painting for the "Accent" of the Elegance Cabin is Smooth, visual gloss. Metallic Colours have different finishes according to the table below

Metallic Finishes and Descriptions	
R06	Metallic RAL9006 Coarse Texture Visual Gloss
R07	Metallic RAL9007 Coarse Texture Visual Gloss
R09	Metallic RAL9006 Medium Texture Visual Gloss
R10	Metallic Fine Texture Visual Matt

Please refer to the annex for the complete list of colours and groups.

Pictures are purely indicative and cannot be considered controlled samples. Sample kits are available on request.

All parts can show small colour differences, this is normal and unavoidable. While we take every precaution to minimize visible differences, this cannot be guaranteed.

Skinplate Matching RAL Colours

RAL	Skinplate
RAL 9003	A1; PPS10
RAL 9010	A4
RAL 1013	A13; PPS11
RAL 1015	G1
RAL 5024	B13
RAL 7035	N1; PPS1
RAL 7037	Metal Like

"Any other RAL" colours are available with extra price and extra delivery time as a special request.

Coarse Texture



Metallic colours



R06



R07




R09



R10

Selecting high frequency RAL colors significantly reduces the powder-coating scrape rate with positive effect for the environment.



2. What are the reaction forces on the building and the forces on the fixings which support the frame to the wall?

Details regarding the forces are specifically provided for each units in the technical dossier. As a general information here are indicated typical loads according to typical conditions of external agents (wind, snow, temperature) and typical fixing solutions of the Home Ifits to the building.

Reaction forces from the lift to the building floor:

- ◆ The lift applies to the pit on the area "P" a force function of the travel.
- ◆ This force can be considered uniformly distributed onto the base plate.
- ◆ The shaft applies to the shaft base area "S" a force function of the travel
- ◆ This force is applied to the four corners' plate of the shaft structure.
- ◆ Maximum force as a function of the lift's travel.

Load from the lift to area "P"

Travel (m)	Altura Diamond [BL41] Load (kN)	Altura Diamond [BL48] Load (kN)
2	19,5	36,5
4	20	37
6	20,5	37,5
8	21	38
10	21,5	38,5
12	22	39
14	22,5	39,5
16	23	40
18	23,5	40,5

Load from the lift to area "S"

Travel (m)	Altura Diamond Total (kN)	Altura Diamond each corner (kN)	Altura Diamond specific on each corner (N/mm ²)
2	12	3	0,16
4	16	4	0,21
6	20	5	0,26
8	24	6	0,32
10	28	7	0,37
12	32	8	0,42
14	36	9	0,47
16	40	10	0,53
18	44	11	0,58

Reaction Force on the wall (rail side) - Concrete shaft:

- ◆ The force is distributed to the wall through each crossbeam.
- ◆ Vertical distance between each crossbeam is on average 1,1 - 1,5 metre
- ◆ Maximum force applied to each fixing point as a function of the lift's

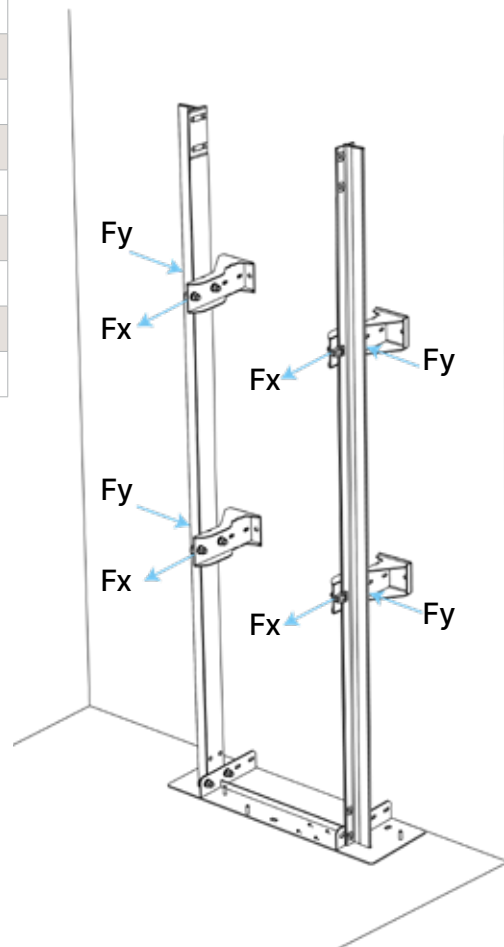
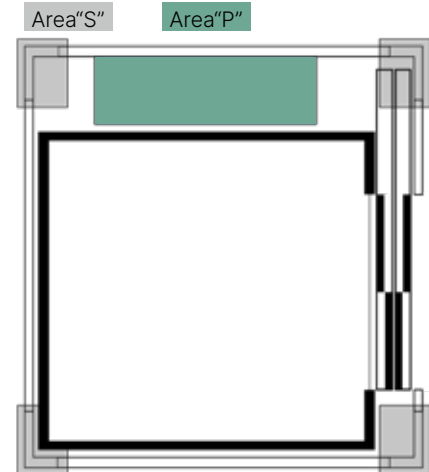
Speed (m/s)	Fx guide side [kN]	Fy guide side [kN]
<= 0,15	2,6	0,9
> 0,15	4,7	1.6

speed.

Reaction Force on the wall (rail side) - Metal shaft structure:

- ◆ The metal structure shall be fixed to the existing building typically every 2000 mm in height through expansion bolts.
- ◆ A wide range of fixing solutions is available to cover the most stringent applications.

Lift type	Base plate dimensions/ Area "P" dimensions
Type I (Narrow)	726×245 mm
Type II (Wider)	1125×245 mm



- ◆ Loads in typical conditions never exceed 3 kN for each fixing point.
- ◆ Further information are included in our Fixings guide.

3. To which standards do the lifts comply?

Altura Diamond with speed 0,15 m/s are type approved, CE marked and complies with the Machine Directive 2006/42/EC, by following the harmonized standard EN 81-41. Specifications and functionalities may vary based on markets and models.

CE Certificates are available on partner desktop.

Lifts with higher speed (up to 0,4 m/s) are approved for sales in Australia and other extra european countries, where allowed.

Specific declarations according to local codes can be provided on request.

Nomenclature will change according to the different specifications. See side table with model codes

Altura Diamond Nomenclature

Model Code	Max Speed	Certification
BL41	0,15 m/s	CE type approved
BL46	0,3 m/s	Outside EU only in selected countries
BL47	0,35 m/s	
BL48	0,4 m/s	

4. What does it mean that the Shaft Structure is suitable for seismic conditions?

Our Shaft Structure is designed to be used also in locations where a seismic event can occur. Specifically, the structure has been checked according to the requirements of the Eurocodes and NTC2018 (Italian reference standard) which provide guidelines on the structural calculation in seismic conditions.

Indeed, it is not possible to state a priori a degree of resistance according to and earthquake's strength scale. The structure must be checked according to the stratigraphic and topographical conditions of the soil and subsoil and of the predictable ground acceleration in these areas. The structure's behavior and its resisting capacities also depend on its geometry and boundary constraint conditions.

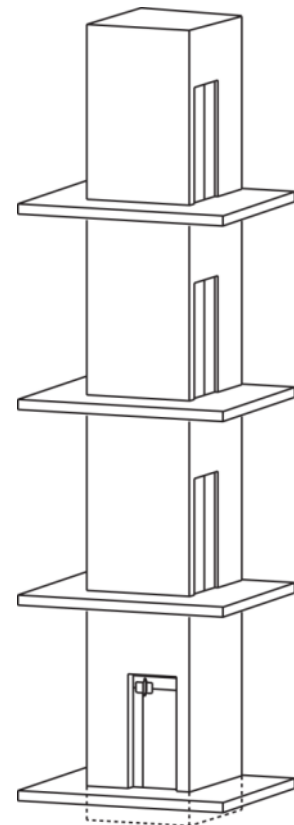
Specific verification could be necessary according to local regulation. Please contact us for specific cases.

5. Which is the pit needed for installation?

Pit is 140 mm independently from the Altura Diamond model.

In case of cabin prepared for customer's floor the Pit shall increase accordingly up to 160 mm (for a 20 mm floor).

In a concrete shaft, in case we have only the bottom landing access at one side, a 250 mm pit is needed to grant access to the door operator for installation and maintenance.



Pit 250 mm

Please contact us for specific cases.

6. Can the Home Lift be installed if accessible spaces exist below the lowest landing floor?

As a general rule: Yes, provided that the building can sustain the dynamic loads from the lift. There is a specific optional version for these cases: Altura Diamond "Penthouse" that has a specific counterweight system provided with a dedicated safety gear.

Available for sliding Doors only, this version has an extra cost and requires higher headroom (+390 mm) and bigger shaft depth (+30 mm).



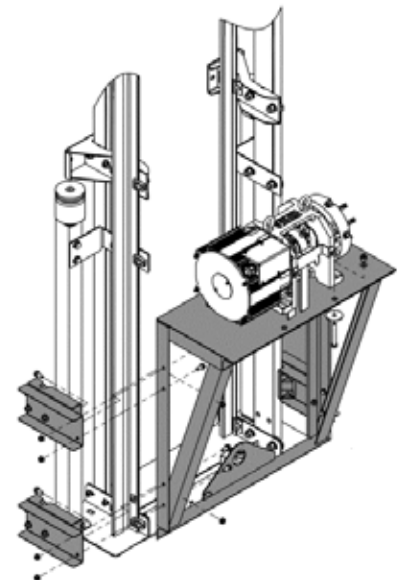
7. Can the Home Lift be installed in an hoistway bigger than the value specified in the plan sizes table?

As a general rule: YES, provided that the maximum gap between the cabin and the shaft wall does not exceed 150 mm.

Please contact us for specific cases.

8. How can I get the specific Installation tools?

Specific tools has been designed for a safe and easy installation and maintenance of Altura Diamond. It is possible to order the Installation kit together with your unit, selecting it at Configuration stage or as spare parts.



9. What is needed for outdoor application?

Options suggested for outdoor application are indicated in the price list.

The Shaft outdoor kit include canopies for landing doors.

Depending on local weather conditions and installation, small quantity of rainwater can leak into the lift via landing doors or shaft. For this reason we always advice that the pit floor is drained with a proper system to direct the rainwater away.

We advise also to protect the main cabinet from direct rain as it is not watertight.

In addition, in case of extreme/particular heavy rain environment and in order to reduce even further the small quantity of water in the shaft, it could be advisable to seal the junctions between crossbeams/jambs or jambs/jambs with proper silicon. Panels with silicon are recommended.

Installation is not recommended in salt or chlorine environment.

For example in case of installation close to sea or close to a swimming pool.

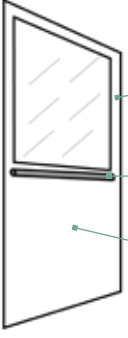
In case of Installation in environment with strong sun irradiation, inside of the shaft it could be reached high temperatures. In this condition, we advise to order half-reflecting glass (available in the price list) and to contact a conditioning and air treatment specialist to identify the best solution to adopt in order to keep under control the temperature inside the shaft.

If the temperature inside the shaft is too high (>40° C as general indication) the use of the platform must be restricted.

Please refer to our pre-installation manual for more specific information and contact our drawing office for any additional requests or for special solutions.

10. How do the Panoramic walls match with the cabin finishes?

For the Standard Cabin,

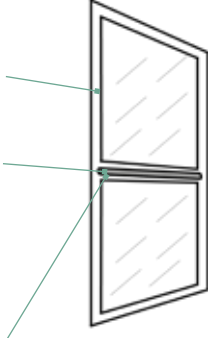


The frame of the full or 1/2 panoramic wall is in the same finishes as the other cabin walls.

The handrail is not included with the full or 1/2 panoramic wall. It can be ordered with extra price. [Mandatory on Full Panoramic wall in Public Access].

The blind 1/2 wall below the 1/2 panoramic wall is always in the same finish as the other cabin walls.

In some cases, a horizontal frame divides the full panoramic wall in two sections.




1/2 Panoramic Wall

Panoramic Wall

The external cladding of the full or 1/2 panoramic wall is always Alluminium

For the Elegance Cabin,

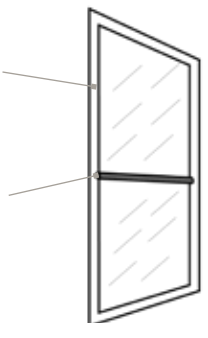


The frame of the full and 1/2 panoramic wall is Stainless Steel Satin

The handrail is not included with the full or 1/2 panoramic wall. It can be ordered with extra price [Mandatory on panoramic wall in Public Access].

The blind 1/2 wall below the 1/2 panoramic wall is always in the same finish as the other cabin walls

The external cladding of the full or 1/2 panoramic wall is always Stainless Steel Satin.



1/2 Panoramic Wall

Full panoramic Wall

Features & Benefits

You can always get out of the Home lift by yourself

If there is a power failure, you can always get out of the Home lift by yourself with automatic emergency lowering. Use the cabin buttons and the lift will take you to a pre-set lower floor where you can open the door and get out.

No need for a machine room

Traction machine is located in the top part of the hoistway with an headroom of 2600 mm and a pit as only 140 mm for a gearless Home Lift.

Electronics is located in a discrete cabinet usually positioned side to the door at top landing in the shaft.

The safest lift of its kind

For safety we prefer to count on more than one system. The overspeed governor and brake is separate from the main drive system. The electronics are certified by a third party with the highest safety Integration level for units of this kind (SIL3).

Low operation and maintenance cost

The entire portfolio of the TKE Home Lifts is based on a common electronics with CAN BUS connection granting easy diagnostic and maintenance.

Duty Cycle

Home lifts are intended for low traffic in residential or public buildings. Altura Diamond can run up to 60 travels per hour, with no restrictions. In case of heavier use, our lifts are provided with safety devices to standby the unit and prevent damages from overheating until the normal operation conditions are reset.

Structural Shaft

TKE's metal shaft means the lift is suitable for outdoor installation in seismic conditions, making it the ideal premium mobility enhancement for private homes.

Energy efficiency

Altura Diamond, tested in different configurations and speeds, has been rated as the best energy efficiency class, with stand-by consumption significantly below 50W and extremely low annual nominal consumption (*).

The pinnacle of German engineering and Italian design

The Altura Diamond delivers true comfort and efficient engineering in every detail.

Gearless cog-belt technology ensures quiet operation with an extra-gentle start and stop while its wide selection of bespoke interior finishes can accommodate each customer's individual design preferences.

(*) Usage category: 1 according to VDI 4707-1. Measurement carried out on 08 November 2017. Altura Diamond Home lifts achieved the A class, the highest energy rating under the VDI 4707 classification. Actual performances are only indicative for similar units. Notified bodies only are entitled to perform measurements and classification.

Annexes

DWG-Altura Diamond

Includes the drawings of all the predefined and modular plan sizes for Altura Diamond applications.

There is a specific file for the "Penthouse" Version (DWG-Altura Diamond_OSG_CWT)

TAB-Altura Diamond

Includes all the predefined and modular plan sizes for Altura Diamond applications in a tabular form with the main dimensions and information.

DGM-Altura Diamond

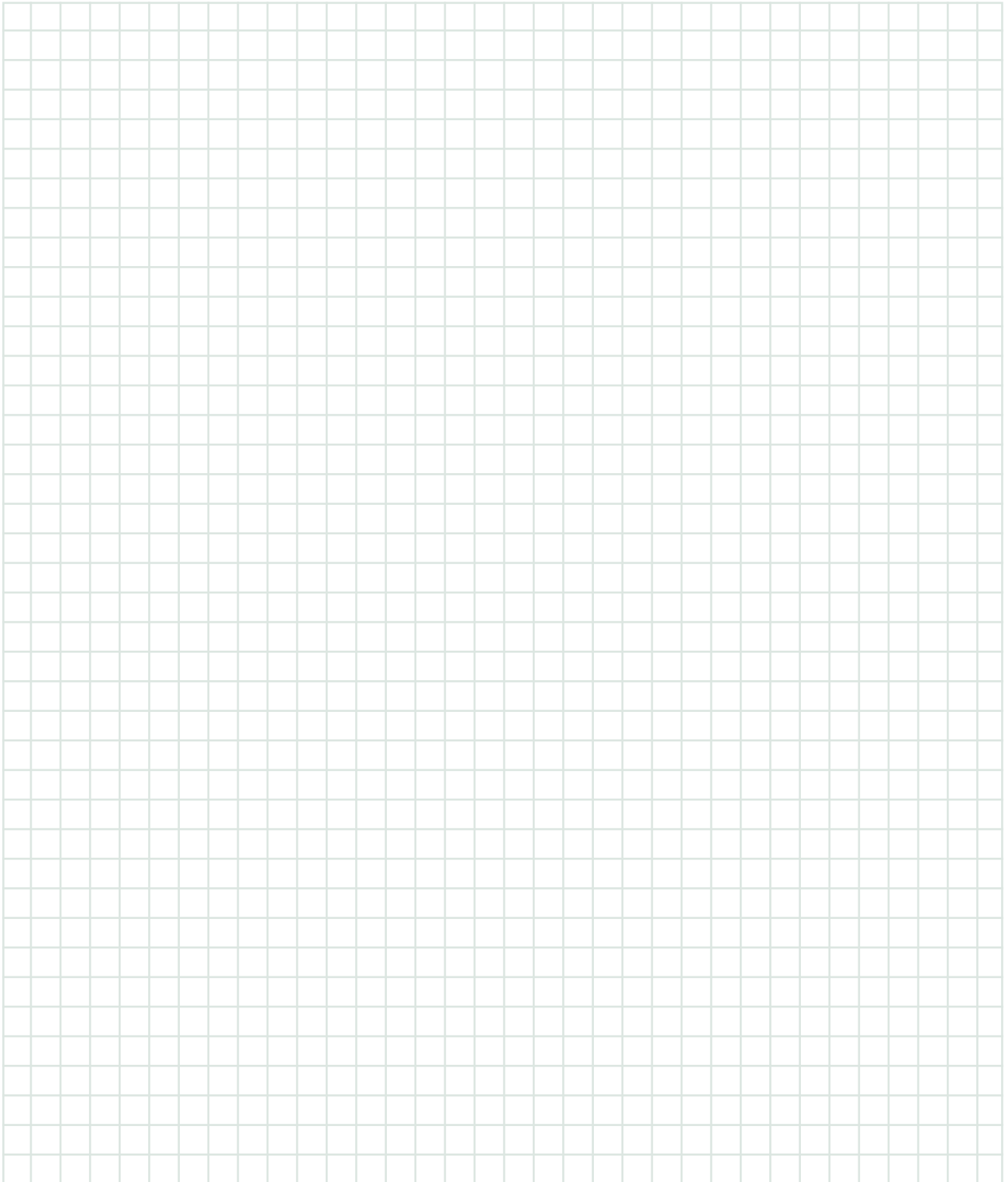
Includes the feasibility diagrams and the formulas to pass from Cabin dimensions to Shaft dimensions. It includes also useful indications between cabin sizes and door sizes.

For experienced professionals, only.

RAL-Colours-Groups

Includes the RAL colours grouped in classes.

All images and colours are for illustrative purpose only.



Model Code
BL41

Product Codes
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BL41-ST-xxx

Commercial Names
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