access
business development division

Altura Diamond

PRODUCT CATALOGUE

Access. Everywhere. For Everyone.

Contents

Altura Diamond cogbelt lifts comply with the Machine Directive 2006/42/EC by following the harmonized standard EN 81-41. They are also compliant with the Electromagnetic Compatibility Directive EMC 2014/30/EU and Low Voltage Directive 2014/35/EU.
EI 120 fire & smoke proof doors comply with EN 81-58 according to the Lift Directive 95/16/EC.
Altura Diamond cogbelt lifts are type approved and CE marked. Certificates are available on request.

CE	Model Codes	Product Codes	Commercial Name	Document name	Date
	BL41 BL46 BL47 BL48	BL4x-ES-FDC BL4x-ST-FDC BL4x-ES-SDC BL4x-ST-SDC	Altura Diamond	CAT-BL41 V1.11	November 2018

Product Summary
ALTURA DIAMOND

Driven by innovative cogbelt technology, the Altura Diamond redefines home lift luxury with its near silent operation and stylish details.

The Altura Diamond has a fully enclosed cabin, with one-touch operation and automatic doors. The lift is supplied with its own metallic shaft or can be installed in an existing masonry shaft.

Product Summary

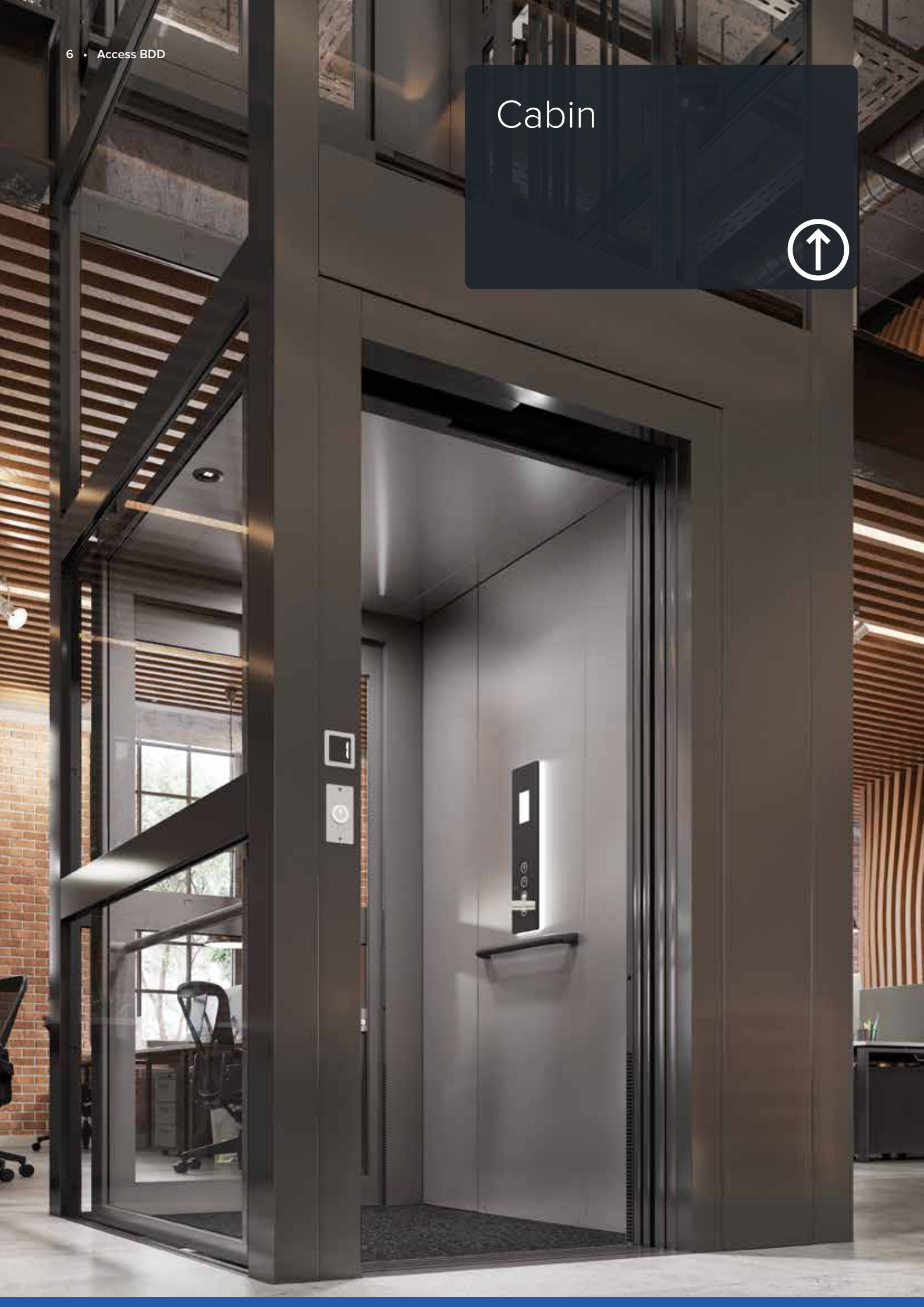
TECHNICAL SPECIFICATIONS

Compliance:	European Machine Directive 2006/42/EC Reference standard EN 81-41
Drive system:	Cogbelt and counterweight system, driven by a gearless motor
Rated speed:	Europe: max. 0.15 m/s (2006/42/EC). Up to 0.4 m/s outside Europe, where permitted by local regulations
Travel (minimum - maximum):	1100 – 18000 mm
Distance between intermediate floors:	Opposite and adjacent accesses: minimum 250 mm Same side access: sliding doors 2500 mm / swing doors 2300 mm
Number of stops:	Maximum 6 stops per lift
Doors:	Maximum 2 doors per floor / 12 doors per lift
Type of accesses:	Frontal, lateral, opposite or adjacent
Pit:	140 mm when used with a metallic shaft. If a pit is not possible, the lift can be used with a ramp. For structural shafts, see note p37.
Shaft type:	Metallic structural shaft, or existing masonry shaft.
Shaft top height:	Structural shaft: 2450 - 2630 mm Masonry shaft: 2350 - 2450 mm
Cabin types:	Fully enclosed with sliding doors or with folding doors
Controls:	Automatic (one-touch) controls on cabin and landing. Call reservation on landings.
Display panels:	Cabin display and optional landing displays, with TFT screen
Application:	Indoor or outdoor
Emergency lowering:	Battery operated emergency lowering with UPS
Control voltage:	24 V
Motor:	2.8 kW
Power requirements:	1-phase 230 V AC 50/60 Hz
Maximum power:	1.85 kW (when used at 0.15 m/s) 3.5 kW (for up to 0.4 m/s)
Circuit breaker / RCD:	16A tripping curves C / 30 mA class A or B
Rated load:	250 - 400 kg depending on cabin size

Product Codes

Model Code	Max Speed	Certification
BL41	0.15 m/s	CE type approved
BL46	0.3 m/s	Available in selected countries outside Europe
BL47	0.35 m/s	
BL48	0.4 m/s	

Cabin



Cabin Dimensions

PRE-DEFINED PLAN SIZES

The Altura Diamond is available in eight predefined plan sizes as listed below, or the lift can be built to specific dimensions within the minimum and maximum values shown in the table on p42.

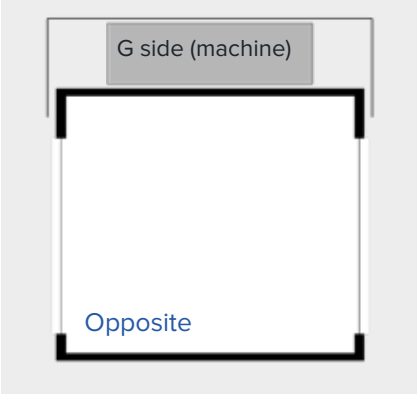
The rated load according to EN81-41 (250 kg/m²) depends on the cabin size. access configuration and optional features, with a maximum possible load of 400 kg.

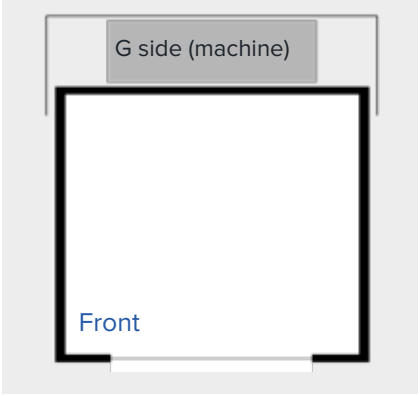
Altura Diamond: Predefined plan sizes

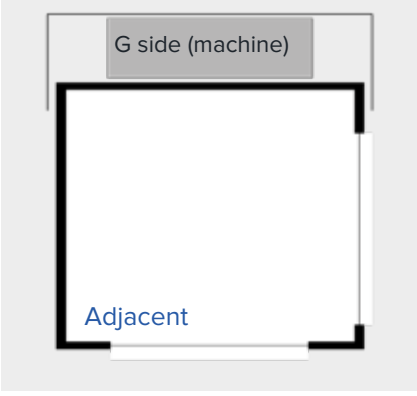
Reference	Nominal cabin dimensions (mm)	Nominal floor area (m²)	Max load * (kg)
P1	900 x 1200	1.08	325
P2	1000 x 800	0.80	325
P3	1000 x 1000	1.00	325
P4	1200 x 1000	1.20	400
P5	1200 x 1200	1.44	400
P6	1400 x 900	1.26	400
P7	1400 x 1000	1.40	400
P8	1400 x 1100	1.54	400

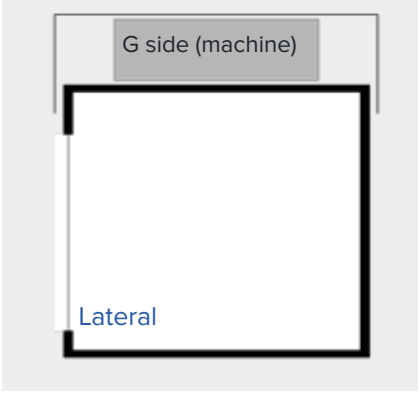
*Maximum load is subject to a feasibility check. Dimensions and layouts for the predefined plans are shown in detail on pp 44-47

Cabin Door Configurations









Cabin with sliding doors

SLIDING DOORS: CABIN AND LANDING

Automatic telescopic doors on each cabin and landing access (maximum two accesses per floor), with two-panel side opening or four-panel central opening. Each access is protected with photocells as standard. Full height light curtains are available as an option.

Cabin and door heights

2100 mm cabin height with net door height 2000 mm.

In the case of the Deluxe cabin with false ceiling, the net cabin height is reduced by 70 mm.

Sliding door options: cabin and landing

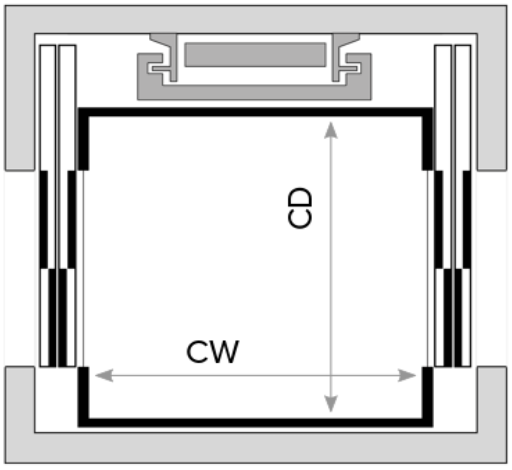
- Glass panels with stainless steel surround;
- Stainless steel;
- Steel, painted in choice of RAL colour;
- Steel, coated with coloured or metallic film: for options, see the cabin wall skinplate range pp 12-13.

Additional options for landing doors

- Steel, painted in metallic colour: see p36;
- Glass panels with frames in stainless steel or painted in choice of RAL colour;
- Treated for outdoor use (stainless steel or paint);
- Fireproof doors: stainless steel or painted, for indoor use only.

For further details and dimensions of sliding doors, see pp 25-26.

Cabin Dimensions



Maximum and minimum sizes (CW x CD)

Smallest cabin: 750 mm x 650 mm
Cabin with maximum width: 1400 mm x 1100 mm
Cabin with maximum depth: 1200 mm x 1200 mm

See pp 42-47 for feasibility information and a selection of pre-defined plan sizes.

Cabin with folding doors

CABIN FOLDING DOORS / LANDING SWING DOOR

Automatic folding cabin doors (four panels, central opening) are also available. When folding doors are used, the landings are fitted with swing doors.

Cabin and door heights

2100 mm cabin height with net door height 2000 mm.

In the case of the Deluxe cabin with false ceiling, the net cabin height is reduced by 70 mm.

Folding cabin door options

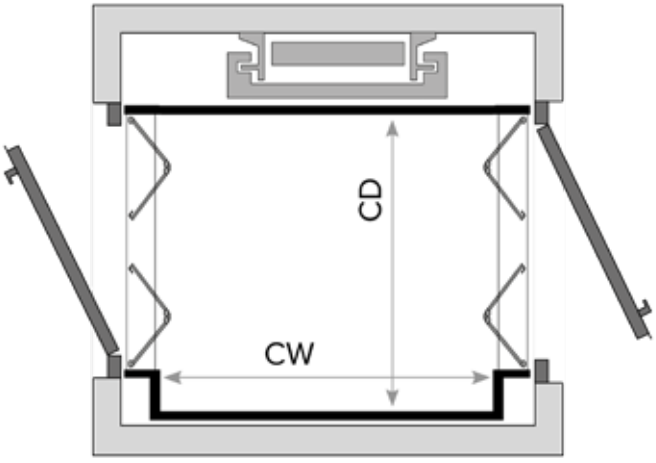
- Glass panels with stainless steel surround;
- Painted in choice of RAL colour;
- Stainless steel.

Landing swing door options

- Panoramic window in choice of glass styles;
- Steel, painted in choice of RAL colour;
- Steel, painted in metallic colour: see p36;
- Stainless steel finish (indoor use only);
- Paint, treated for outdoor use;
- Fireproof doors, painted or with stainless steel finish, for indoor use only.

For further details and dimensions of folding and swing doors, see pp 27-30.

Cabin Dimensions

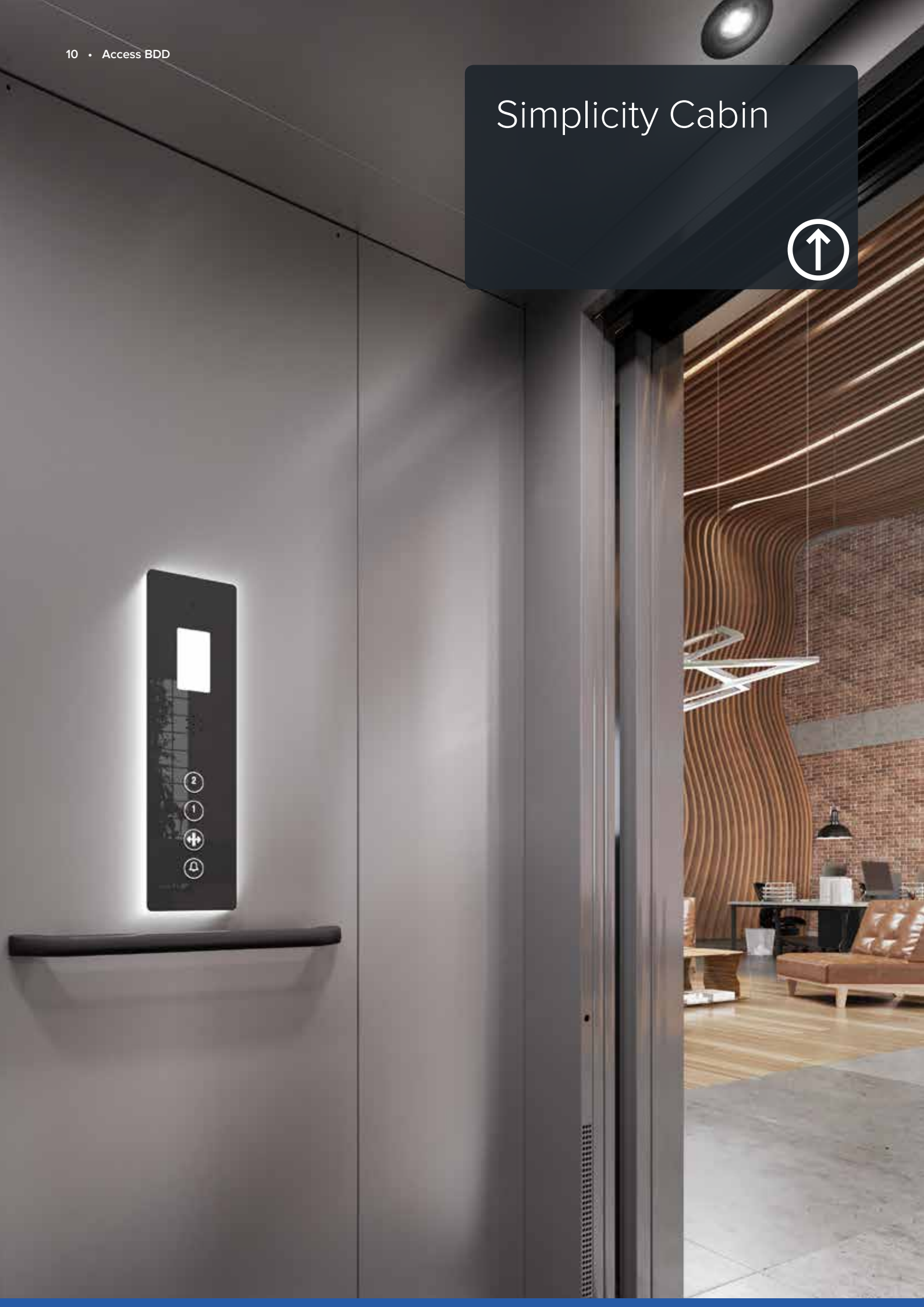


Maximum and minimum sizes (CW x CD)

Smallest cabin: 750 mm x 650 mm
Cabin with maximum width: 1400 mm x 1100 mm
Cabin with maximum depth: 1200 mm x 1200 mm

See pp 42-47 for feasibility information and a selection of pre-defined plan sizes.

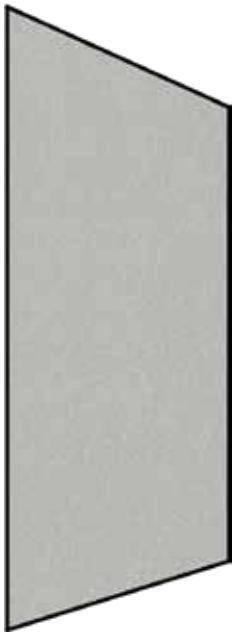
Simplicity Cabin



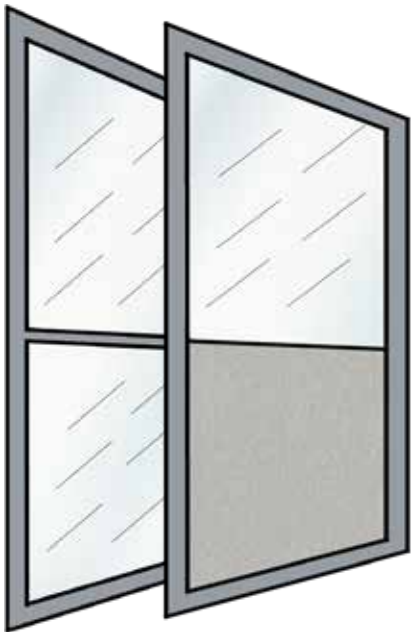
Simplicity cabin
DESIGN AND LAYOUT

The Altura Diamond Simplicity cabin has a clean and streamlined look, aligned to other products in the Altura Lift family.

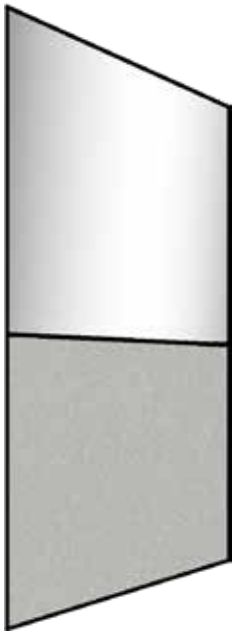
Cabin Walls



Plain walls
Skinplate, stainless steel or painted in a choice of colour. The insides of the doors are finished to match the walls: see options on following pages.



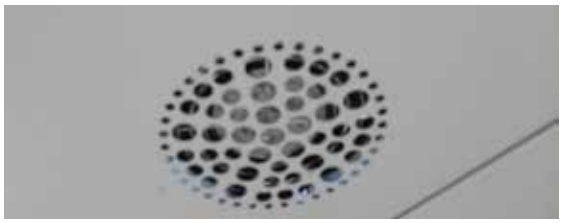
Glass walls
Full-height or half-height, plain glass can be selected for any wall except the machine side. The full-height glass panel is divided by a horizontal cross-piece.



Mirror
A half-height mirror with optional handrail can be affixed to any wall except for the machine side.

Ceiling

The Simplicity cabin has a plain ceiling, finished to match the cabin walls and illuminated with three LED spotlights.



Ventilation fan

A ceiling ventilation fan, positioned near the machine side, is available as an option on the Simplicity cabin. The fan runs automatically when the lift is in use and switches off after a pre-determined time. As an option, a button can be added to the control panel to control the ventilation fan during travel.

Simplicity Cabin
INTERIOR OPTIONS

The Simplicity cabin can be customised with a choice of colours and finishes for the walls, floor and cabin doors.

The cabin walls are made of steel and can be covered with a coloured plastic or stainless steel finish or painted with a choice of RAL colour (gloss 80-90, orange peel finish, coarse grade). Suggested RAL matches for the other painted parts of the lift are given for each skinplate option.

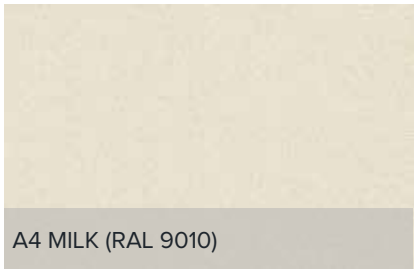
As standard, the whole lift is painted in RAL 9010 (pure white) and the walls are covered with skinplate A4 – milk.

Cabin Wall Options

Plain skinplates

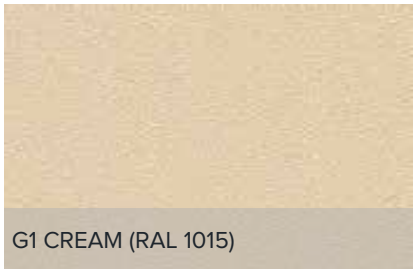
Steel panel with a solid colour textured plastic coating

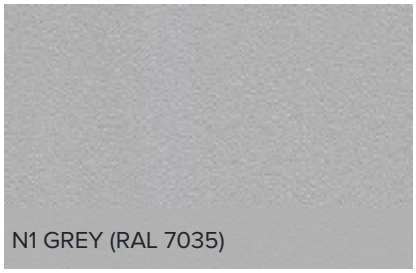

A1 WHITE (RAL 9003)


A4 MILK (RAL 9010)


A13 IVORY (RAL 1013)


B13 BLUE (RAL 5024)


G1 CREAM (RAL 1015)


N1 GREY (RAL 7035)


PPS METAL-LIKE (RAL 7037)


Choice of RAL colour

NOTE: RAL Colours

For all parts of the lift where RAL painting is offered, the choice of colour can be made from the 213 colours in the RAL Chart K7 Classic, excluding pearl and metallic colours. If no colour is specified, the standard colour for all painted parts is RAL 9010 (white). Painting is powder coating with orange peel finish, visual gloss 80-90.

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.

Simplicity Cabin
INTERIOR OPTIONS

Stainless steel


STAINLESS STEEL SATIN


STAINLESS STEEL LINEN
(scratch resistant)

Patterned skinplates

Steel panel coated with lightly patterned smooth finish


PPS10 FROST (RAL 9003)


PPS1 SILVER (RAL 7035)


PPS11 PEARL (RAL 1013)

Flooring

Safety vinyl flooring, with life-time non-slip guarantee. The lift can also be supplied without flooring if you want to use your own. For flush alignment with the landing, customer supplied flooring should be maximum 3 mm deep.


WHITE


SAND


GREY

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.

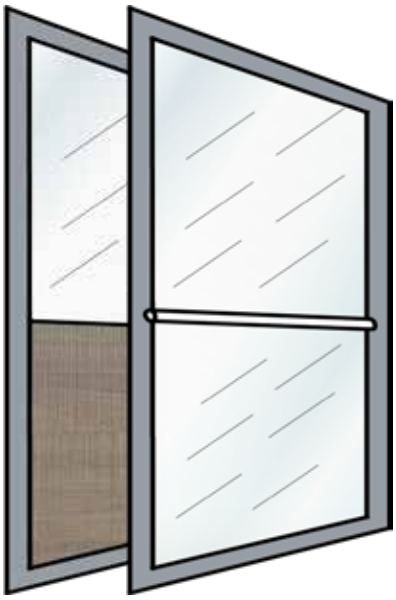
Deluxe Cabin

Deluxe Cabin
DESIGN AND LAYOUT

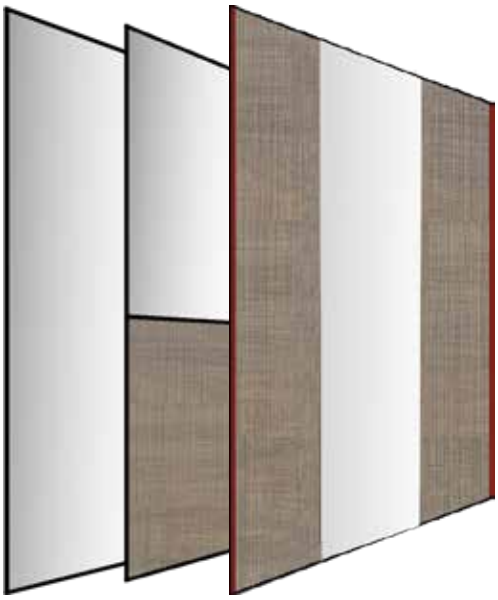
Exclusively available on the Altura Diamond, the Deluxe Cabin has a choice of luxurious wall finishes, with contrasting accents and a suspended ceiling with a choice of soft lighting options.

Design your own Deluxe cabin by choosing from our range of interior options on pp 16-17 or pick a cabin style from our Diamond Collection (pp 18-21).

Walls
A choice of high-pressure laminates, with contrasting central panel and corner accents: see options on the following pages.

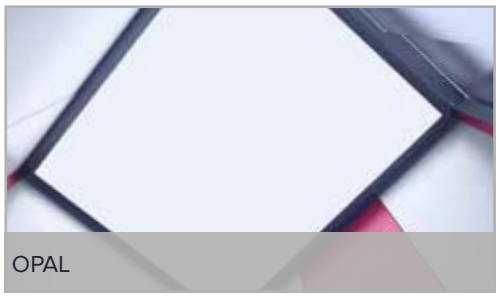


Glass
Full-height or half-height, plain glass, available on all walls except the control panel wall (G side). A handrail is included as standard on full-height glass panels.



Mirror
Full-height, half-height or slim vertical mirrors can be fitted to any wall except the control panel wall (G side). A mirrored central panel for the G side is also available (see options p17).

Ceiling



OPAL

ROUND

PLAIN STEEL

STARRY SKY

The opal, round, and plain steel ceilings are available in either white painted steel (RAL 9010), or satin stainless steel. The starry sky ceiling is always supplied with satin stainless steel.

Reference image left shows: walls – 4367, bright wood, accents – grey 7012, floor – white carpet, ceiling – plain

Walls and Floors
DELUXE CABIN

Walls: high-pressure laminate or stainless steel panels

Wood Effect Laminate


4303 - DARK WOOD

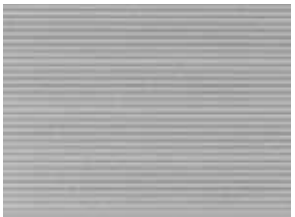

4367 BRIGHT WOOD

4515 BRIGHT WOOD


4511 WARM WOOD


4533 BRIGHT WOOD

Textured Effect Laminate


SILK - TX 2606

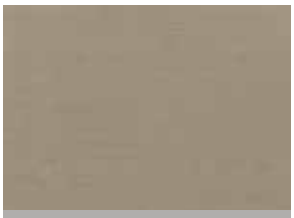

LINEN - TX 3318


WOODGRAIN - TX 4485

Stone Effect Laminate


CONCRETE 1 - CR 3331

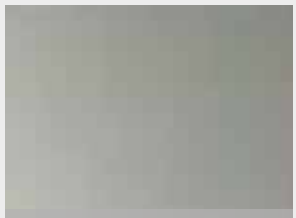

CONCRETE 2 - CR 1117


LIMESTONE - CR 868

Stainless steel


MARBLE - CR 585

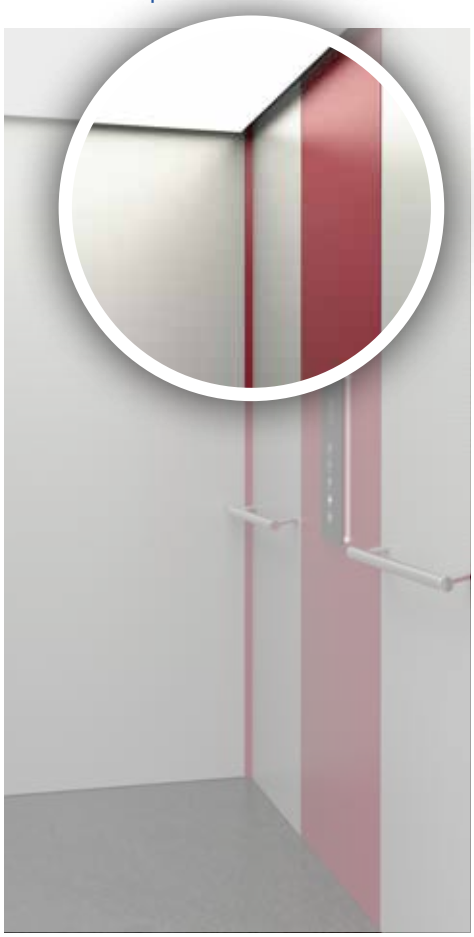

SATIN


MIRROR

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.

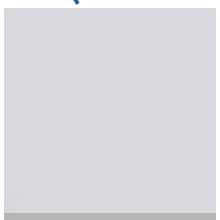
Walls and Floors
DELUXE CABIN

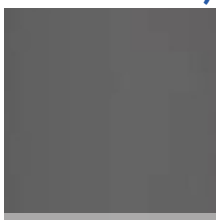
Central panel and corner accents

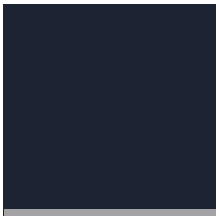


Solid colour finish (RAL colour references)

9003 WHITE


7035 GREY

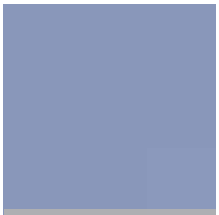

7012 DARK GREY


7021 GREY-BLACK


1019 BEIGE


3003 RED


6011 GREEN


5024 PALE BLUE

Stainless steel finish


SATIN


MIRROR


GOLD EFFECT

Flooring

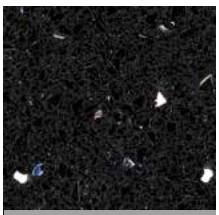
Granite

Composite stone, with a polished granite effect finish

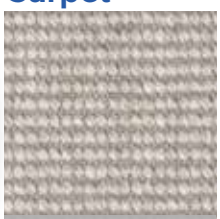

WHITE


SAND


GREY


BLACK

Carpet


CARPET - WHITE


CARPET - SAND


CARPET - GREY

The vinyl flooring from the Simplicity range can also be selected for the Deluxe cabin, or the cabin can be supplied without flooring for the customer to apply their own (depth 20 mm)

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.

Diamond Collection
MODERN RANGE

1. MODERN EUROPE

2. MODERN AMERICAS

3. MODERN ASIA

1. Modern Europe

- Wall: Bright wood 4515
- Accent: Black 7021
- Ceiling: Round
- Flooring: Grey vinyl
- Mirror: None
- Handrail: Stainless steel, 2 pieces

2. Modern Americas

- Wall: Concrete 3331
- Accent: Blue 5024
- Ceiling: Plain
- Flooring: Grey vinyl
- Mirror: Slim vertical
- Handrail: Stainless steel, 2 pieces

3. Modern Asia

- Wall: Texture 2606
- Accent: Red 3003
- Ceiling: Opal
- Flooring: Grey vinyl
- Mirror: None
- Handrail: Stainless steel, 2 pieces

(2 piece handrails for 1400 wide cabin only)

Diamond Collection
CLASSIC RANGE

4. CLASSIC EUROPE

5. CLASSIC AMERICAS

6. CLASSIC ASIA

4. Classic Europe

- Wall: Cool wood 4511
- Accent: Beige 1019
- Ceiling: Plain
- Flooring: Sand carpet
- Mirror: Full wall
- Handrail: Stainless steel, 2 pieces

5. Classic Americas

- Wall: Texture 3318
- Accent: Light grey 7035
- Ceiling: Plain
- Flooring: Grey vinyl
- Full height panoramic wall
- Handrail: Stainless steel on panoramic wall

6. Classic Asia

- Wall: Dark wood 4303
- Accent: Red 3003
- Ceiling: Plain
- Flooring: Grey vinyl
- Mirror: Half wall
- Handrail: Stainless steel 2 pieces

(2 piece handrails for 1400 wide cabin only)

Diamond Collection
NATURAL RANGE

7. NATURAL EUROPE

8. NATURAL AMERICAS

9. NATURAL ASIA

7. Natural Europe

- Wall: Warm wood 4533
- Accent: Green 6011
- Ceiling: Plain
- Flooring: Grey carpet
- Mirror: None
- Handrail: Stainless steel, 2 pieces

8. Natural Americas

- Wall: Texture 4485
- Accent: Dark grey 7012
- Ceiling: Plain
- Flooring: Sand carpet
- Mirror: None
- Handrail: Stainless steel, 2 pieces

9. Natural Asia

- Wall: Bright Wood 4367
- Accent: Green 6011
- Ceiling: Plain
- Flooring: Grey carpet
- Mirror: None
- Handrail: Stainless steel, 2 pieces

(2 piece handrails for 1400 wide cabin only)

Diamond Collection
INTERNATIONAL RANGE

10. INTERNATIONAL MODERN

11. INTERNATIONAL NATURAL

12. INTERNATIONAL CLASSIC

10. International Modern

- Wall: Limestone 868
- Accent: Steel mirror
- Ceiling: Plain
- Flooring: Granite effect - white
- Mirror: none
- Handrail: Stainless steel, 2 pieces

11. International Natural

- Wall: Marble 585
- Accent: Dark grey 7012
- Ceiling: Plain
- Flooring: White carpet
- Mirror: None
- Handrail: Stainless steel

12. International Classic

- Wall: Concrete 1117
- Accent: Steel gold
- Ceiling: Plain
- Flooring: Granite effect - sand
- Mirror: None
- Handrail: Stainless steel, 2 pieces

(2 piece handrails for 1400 wide cabin only)

Control Panel
STANDARD FEATURES

The sleek design of the Altura Diamond control panel is a enhanced by a white backlight around the profile and the buttons.

The control panel has a polished black finish as standard, with mirrored steel or a gold effect offered as options on the Deluxe cabin. The control panel is always fitted on the machine side of the cabin.

Control panel buttons

The diameter of the buttons is 37 mm, and height of the centre line of the button panel is between 900 and 1100 mm from the platform floor, in accordance with EN 81-41. All buttons include Braille as standard. The control panel contains the following buttons, arranged centrally or in two columns, depending on the number of stops:

- Destination buttons: available with the following letters and numbers: -2, -1, 0, 1, 2, 3, 4, 5, 6, B, BG, BV, G, K, KV, P, U, E.
- Door open button
- Alarm button: connected to an external alarm sounder and to an optional auto-dialler. When the button is pressed, the siren will give a loud signal outside the lift and, if fitted, the alarm auto-dialler calls a pre-progammed emergency number.

Handrail

A handrail with a minimum cross-sectional diameter of 30 mm is supplied with all lifts, as required by EN81-41. The height between the platform floor and top edge of the handrail is 900 mm +/- 25 mm.

Simplicity Cabin

Control panel:
Black

Handrail:

- One piece black rail placed on the central panel underneath the control panel (shown above)
- Full width stainless steel rail, positioned on any side except the control panel wall.
  More than one full-width rail is possible, if required.

Deluxe Cabin

Control panel:
- Black
- Mirrored steel
- Gold effect

Handrail:

Full width rails in stainless steel or gold satin effect can be placed on any wall, including the control panel wall. With a 1400 mm wide Deluxe cabin, the rail can also be fitted in two pieces placed either side of the control panel. The handrail is fitted as standard on all full-height glass walls.

Control Panel (continued)

A full-colour display on the control panel shows floor indicators and other system information. Additional security features are offered to protect users in public buildings and to prevent unauthorised use.

Colour Display

The display is positioned on the control panel above the floor buttons and shows the following information:

- Floor indicator showing the position of the lift.
- An arrow indicating the direction of the lift when travelling
- Icons giving status information:
  - Bell: the alarm button has been pressed.
  - Weight symbol: the lift is overloaded.
- An error code for diagnostics.
- If the lift is connected to the building's fire alarm system, a symbol will be shown when alarm is activated (see below).

Voice announcements are included as standard with the display. These are available in English, Italian, French, German, Spanish, Dutch, Portuguese, Czech and Russian. Optionally, the voice announcement can be replaced by an acoustic signal, or with no sound.

Building Integration

The lift can be connected to the building's fire alarm.

If the fire alarm is activated, a symbol on the display will be shown and the lift will move to a predetermined fire-exit floor and park there.

Key Switch on Control Panel

Use of the lift can be controlled by key-switches placed on the control panel. The control panel can either be fitted with a general key switch which locks the entire operation of the lift, or the floor buttons can be replaced with individual key switches (up to a maximum of 4 per lift) to control access to specific floors.

There are two key options to choose from:

- standard mechanical key
- i-button for one-touch operation.

User-specific configurations can be designed: please contact us for details.

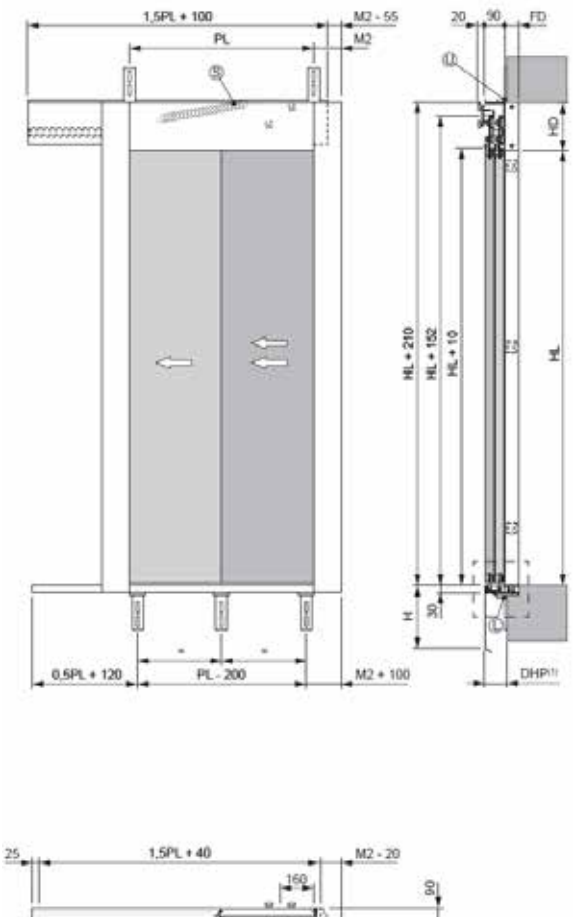
Doors

Sliding Doors
CABIN AND LANDING

Sliding doors: lateral opening with blind panels

- Door height (HL): 2000 mm
- Door frames: 100 mm on each side (M1, M2, HD)
- Door sill: landing - 90 mm, cabin - 70 mm
- Frame depth: 60 mm (FD)
- Opening: right or left, with two panels
- A triangular key for the lock release is provided with each machine.
- Standard installation is fully within the shaft. Sliding door encumbrance in the shaft (DHP) = 110 mm.
- A fire-proof door is available as an option.

Door clear access (PL)	Total width (1.5PL + 145)
600 mm	1045 mm
700 mm	1195 mm
800 mm	1345 mm
900 mm	1495 mm



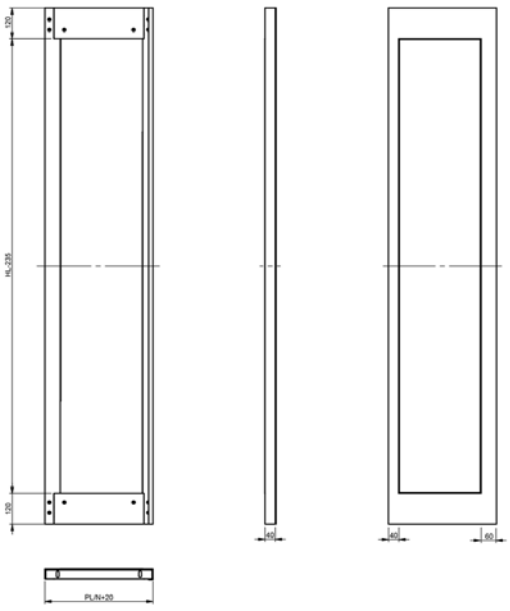
Sliding doors: lateral opening with glass panels

- Door and frame dimensions are the same as the blind version
- The width of each panel depends on the door clear access (PL) as shown in the diagram.
  Panel width = (PL/N)+20, where N is the number of panels.
- The frame around the glass has standard dimensions and has a satin stainless steel finish or can be painted in a RAL colour of choice.

Frame dimensions:
Top and bottom: 120 mm. Lateral: 40 mm and 60 mm

Glass and panel sizes for lateral opening, 2 panels:

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

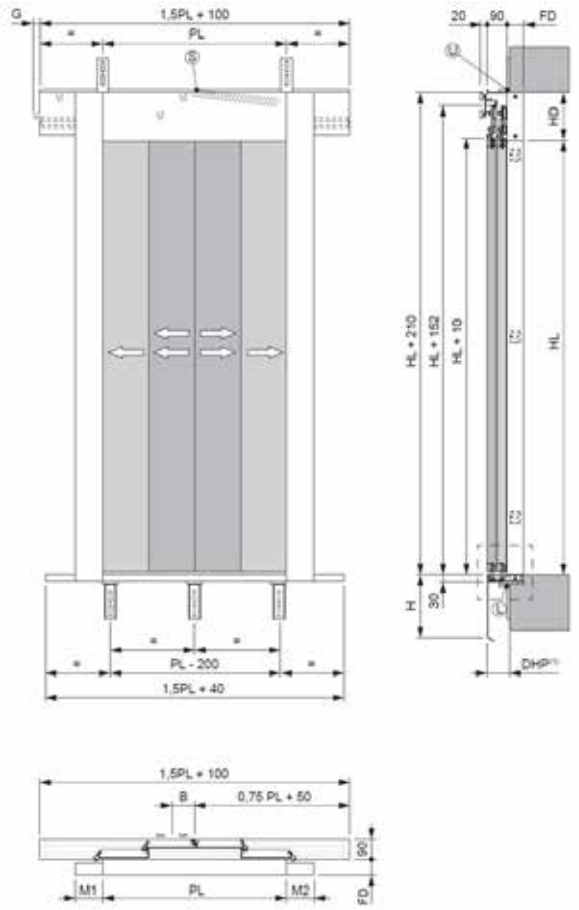


Sliding Doors
CABIN AND LANDING

Sliding doors: central opening with blind panels

- Door height (HL): 2000 mm
- Door frames: 100 mm on each side (M1, M2, HD)
- Door sill: landing - 90 mm, cabin - 70 mm
- Frame depth: 60 mm (FD)
- Opening: central, with four panels
- A triangular key for the lock release is provided with each machine.
- Standard installation is fully within the shaft. Sliding door encumbrance in the shaft (DHP) = 110 mm.
- A fire-proof door is available as an option.

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



The table below shows the tolerance (G) required to install the doors. The narrower the door opening, the greater the tolerance required.

PL	G
600 mm	40 mm
650 mm	30 mm
700 mm	15 mm
≥ 750 mm	0 mm

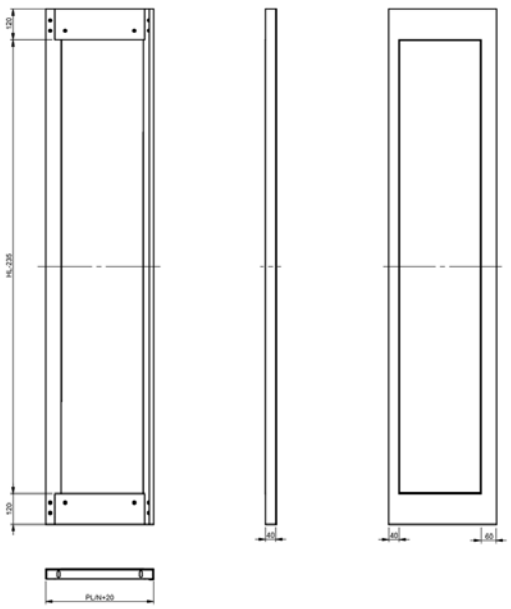
Sliding doors: central opening with glass panels

- Door and frame dimensions are the same as the blind version
- The width of each panel is calculated in the same as for the lateral opening: (PL/N)+20.
- The frame around the glass has standard dimensions and has a satin stainless steel finish.

Frame dimensions:
Top and bottom: 120 mm. Lateral: 40 mm and 60 mm.

Glass and panel sizes for central opening, 4 panels:

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



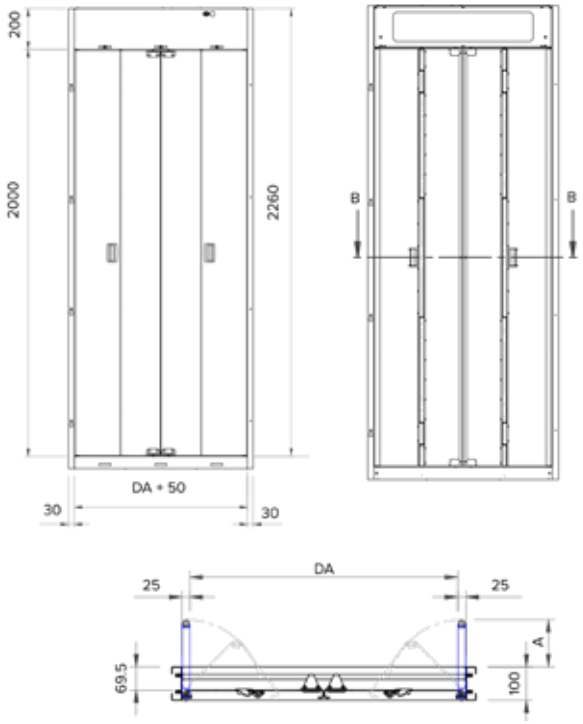
Folding Doors
CABIN

Folding doors: blind panels

- Opening: central, with four panels
- Door height: 2000 mm.
- Door sill of landing door: 100 mm

"A" is the maximum encumbrance in the cabin with the doors open.

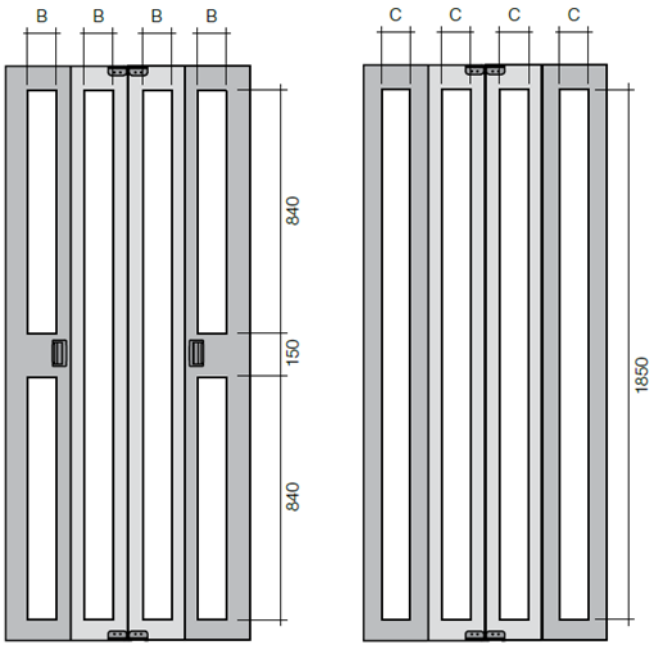
Door clear access (DA)	A
600 mm	90.5 mm
700 mm	111.5 mm
800 mm	140.5 mm
900 mm	165.5 mm



Folding doors: glass panels

- Dimensions and finishes are the same as the blind version.
- Two models are available, with or without handles on the inner side.
- Glass dimensions depend on the door clear access, as shown in the table below:

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



Glass folding doors with handle Glass folding doors no handle

For doors with height 2000 mm
B = Door clear access/4 - 85
C = Door clear access/4 - 53

Landing Swing Door
DIMENSIONS

General information

When folding doors are selected for the cabin, steel swing doors are fitted on the landings. Swing doors can be blind or panoramic.

The large window on the panoramic doors is made of Visarm safety glass 10/11 mm thick.

Door frame

The swing doors are always delivered with frames which are painted in the same colour as the door. Note that it is not possible to order the door or the frame separately. The doors can be hinged on the left or on the right.

The door frames have dimensions of 100 mm on each side. When an automatic door opener is used on doors in a concrete shaft, the top frame is 140 mm.

The actual height of the door is 40 mm higher than the net height.

Door specifications

Opening widths: 600, 650, 700, 750, 800, 850, 900 mm
Opening height: 2000 mm
Total door height (including frame): 2100 mm / 2140 mm

Other sizes may be available on request

Options for door and frame

- Painted in choice of RAL colour;
- Painted in metallic paint (see p36);
- Finished in stainless steel (indoor use only);
- Treated for outdoor use, with RAL or metallic paint;
- Window: transparent as standard, or choice of opaque, semi-reflective, smoky grey or smoky satin (see p36).

Glass window: (Panoramic)
470x1600 mm (door width 700 mm)
570x1600 mm (door width 800 mm)
670x1600 mm (door width 900 mm)

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

BLIND DOOR

PANORAMIC DOOR

Landing Swing Door
ADDITIONAL OPTIONS

The standard swing doors on landings are opened manually and closed semi-automatically by way of a simple closing spring.

The time and speed of the standard semi-automatic swing doors are not adjustable. For greater control over the operation of the swing doors, automatic openers and closers are available. The automatic openers and closers are not available with fire-proof doors.

Internal door closer

The internal door closer is available as an option. It closes the door automatically and includes a function to keep the door open until the user manually closes it. The internal door closer is contained within the door frame, making it invisible from the outside. The closing speed is adjustable.

External Door opener

The external door opener opens the door automatically once the lift has arrived at the landing and closes it after a pre-set time. The opening and closing time and speed are adjustable.

It is mounted on the top frame of the door inside a box with a white painted cover.

When automatic door openers are fitted on two doors at the same landing, the doors will open simultaneously.

Door Handles

TECHNO

MODERN

The landing swing doors have a stainless steel handle. The Techno handle is supplied as standard, or the longer Modern version can be ordered as an option.

Handle Dimensions

Techno: length 207 mm
Modern: length 350 mm, diameter 20 mm

Door Options

EI120 FIRE AND SMOKE-PROOF DOORS

Fire and smoke-proof landing doors are available as an option for indoor installations only.

The swing and sliding landing doors can be supplied in a fire and smoke-proof version that complies with EN 81-58. Glass panels or windows are not available on fire and smoke-proof doors.

Note: a wall mounted call box must always be ordered for the landing control, as it cannot be installed in the frame of fireproof doors. (See p.32)

Swing doors EI120

The fire and smoke-proof landing swing doors are always delivered with a frame which is 100 mm wide on each side.

Opening widths: 600, 650, 700, 750, 800, 850, 900 mm
Opening height: 2000 mm

The actual height of the door is 2040 mm due to a plate which is mounted on the door to cover the gap between the door and the frame. The door and frame can be painted in any RAL colour. If no colour is specified, they are supplied in white (RAL 9010).

Sliding doors EI60 or EI120

Fire- and smoke-proof sliding doors for the landing are available with two-panel lateral opening or four-panel central opening. As standard they are painted in grey: other colours or a stainless-steel coating are available as an option.

Ramp

When used with a metallic shaft, we recommend that the lift is installed in a pit, with a depth of 140 mm. If the lift is installed without a pit, a ramp is mandatory according to EN81-41.

An aluminium ramp with a non-slip surface can be ordered as an option. The width of the ramp corresponds to the width of the corresponding shaft side and the vertical rise is less than 1:4.

Door Options
CONTROLS

A backlit button with a stainless steel faceplate is placed on each landing to call the lift.

The landing control button is normally located on the frame of each landing door. When swing doors are used, it is placed on the same side as the door handle. Optionally, it can be placed away from the lift in an external control box. (see p32).

Call button

The call button shows the floor number and has Braille as standard. It has a backlit frame which changes colour to indicate the status of the lift.

- Green: the lift is at this floor.
- Red: the lift is currently in use.
- A flashing light is used to give a warning status.

Landing Indicator Display

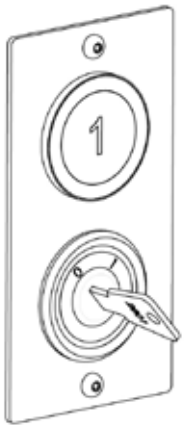
As an option, a digital display can positioned on the door faceplate. The landing display shows the following information:

- Floor indicator showing the position of the lift.
- An arrow indicating the direction of the lift when travelling
- Icons giving status information:
  - Bell: the alarm button has been pressed.
  - Weight symbol: the lift is overloaded.
- An error code for diagnostics;
- Out of service status message

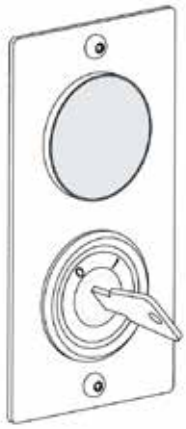
The landing indicator display is available for indoor use only.

Door Locking Options

A lock with a key switch, a one-touch i-button, or a lock prepared for the Eurokey, can be provided either in addition to, or instead of, the call button.



Key switch and call button



Key switch without button

Key switch with call button

The key is used to unlock the landing control button. Once the lock is in the open position, the lift can be used with the call button as normal. This option is recommended when a lift needs to be made available to all users during particular hours of the day.

Key switch without call button

When there is no call button, the lift can only be called and accessed with the key. The key switch includes a school locking function which automatically locks the door after a set time.

Only one key switch is available per door.

Door Options

WALL MOUNTED CALL BUTTON

The landing control button can be mounted away from the door frame in an external box.

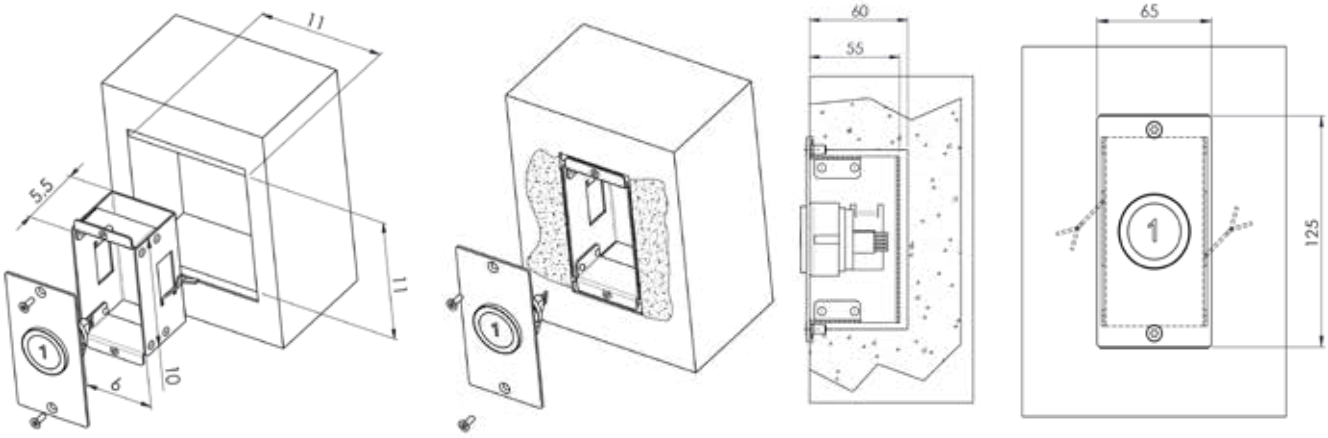
The wall-mounted call button is situated in an external box connected to the lift via a cable at a maximum of 10 m from the lift. It can be surface mounted or flush mounted. The external call button must always be ordered when fire and smoke-proof landing doors are used. The external box can also be used in conjunction with the standard landing control panel to provide an additional call button on any landing.

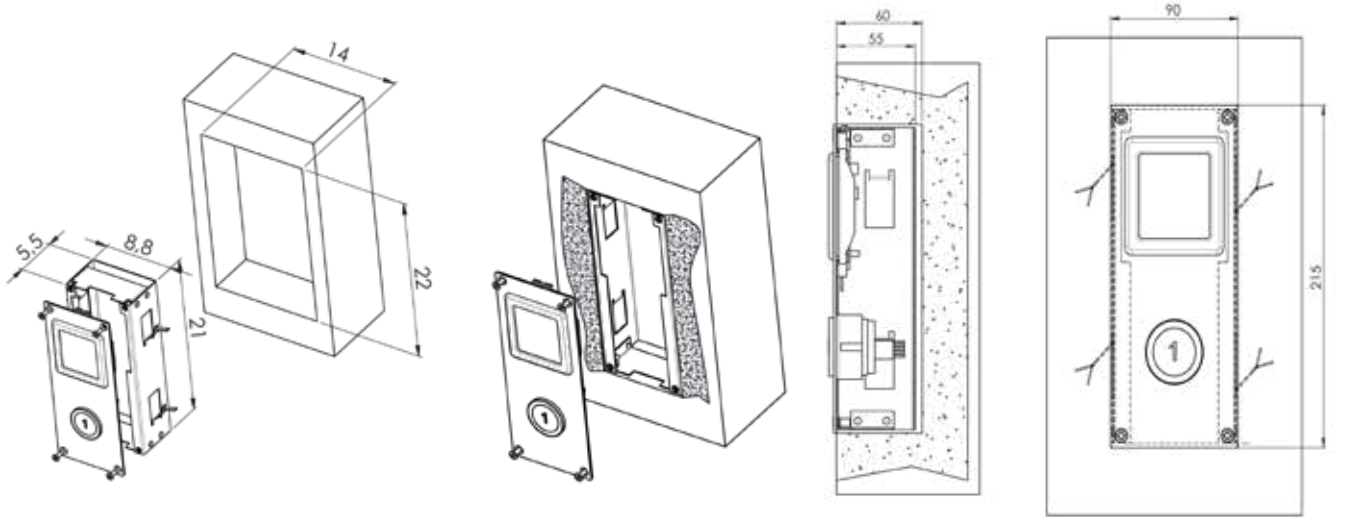
An external call button box can also be provided for use as a remote sender to move the lift between two specified floors. The remote sender is supplied as a single button with no display panel.

Dimensions:

Without display: 130 x 70 x 55 mm
With display: 220 x 95 x 55 mm

Door control: dimensions for flush wall mounting





Communication

Two way communication is supplied as standard inside the cabin.

A communication system in case of emergency is required for compliance with EN81-41. This can be provided as a telephone handset or an auto-dialler.

The user is responsible for supplying a landline or SIM card for connecting the communication equipment in the lift to a telephone network.

Telephone Handset

The telephone handset for emergency calls is mounted on the console wall next to the control panel. It is to be connected to a landline in the building,

Auto-dialler

The auto-dialler equipment is integrated in the control panel and connected to the alarm button. When the alarm button is kept pressed for 3 seconds, the auto-dialler calls through a sequence of pre-programmed numbers until answered.

The auto-dialler is connected to the building's landline or can be fitted with a GSM module for connection to the mobile phone network.

Shaft

Shaft

METALLIC SHAFT: BASIC INFORMATION

The Altura Diamond can be delivered with a metallic shaft or installed in a masonry shaft. The metallic shaft is free of rivets and silicon. It is weatherproof and suitable for seismic conditions.

The required headroom of the shaft at the upper floor (the height from the top floor to the top of the shaft) is between 2450 - 2630 mm, depending on the type of roof and landing doors: see table below. This includes a free height of 30 mm above the shaft for installation purposes. Elongation of the shaft is possible.

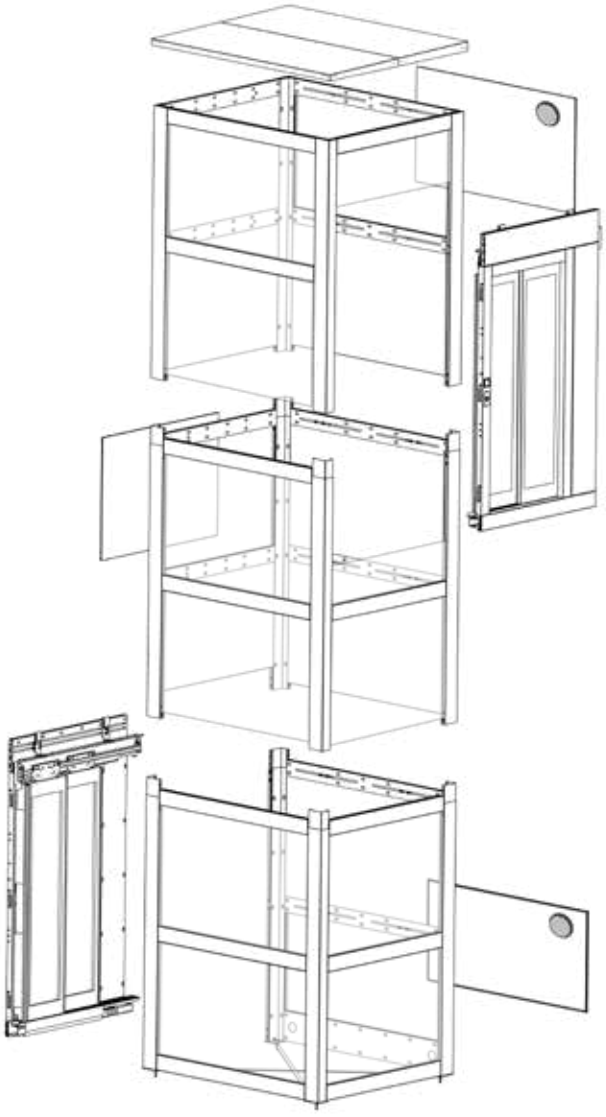
The shaft is powder coated with an orange peel finish (coarse grade) and painted with a gloss level of 80-90 in a RAL colour of choice, or in a selection of metallic colours. (See p.12 for RAL options and p.36 for metallic colours). If no colour is specified, the shaft is painted white (RAL 9010).

Shaft ceiling types

The shaft is available with diagonal bars, a flat roof or an inclined roof. The roof is in one or two pieces, depending on the shaft dimensions.

Shaft height at upper floor:

Model	Installation	Folding / swing doors	Sliding doors
Concrete shaft	Any	2350 mm	2450 mm
Metal shaft with diagonal bars	Indoor	2450 mm	2590 mm
Metal shaft with flat roof	Indoor	2470 mm	2610 mm
Metal shaft with inclined roof	Outdoor	2490 mm	2630 mm



Note: seismic conditions:

The shaft structure is designed to be used in locations where a seismic event can occur. The structure has been checked according to the requirements of the Eurocodes and NTC2008 (Italian reference standard) which provide guidelines on the structural calculation in seismic conditions.

However, it is not possible to state a priori the degree of resistance according to an 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 behaviour and the resistance capacities of the structure also depend on its geometry and boundary constraint conditions.

Specific verification may be necessary according to local regulation. Please contact us for further information in specific cases.

Shaft
PANEL OPTIONS

The metallic shaft is available with plain painted steel or glass panels

All four sides of the shaft are clad with panels in steel or glass, and fitted with a special gasket for water management. The top and bottom panels of the shaft are fitted with round axial ventilators to reduces the effect of condensation inside the shaft.

- Steel: galvanized steel, painted with standard RAL colour or a metallic colour from the selection below.
- Glass panels: laminated safety glass 8/9 mm (4+0.76+4), in choice of five different glass types.

The shaft can have a mixture of steel sides and glass sides.

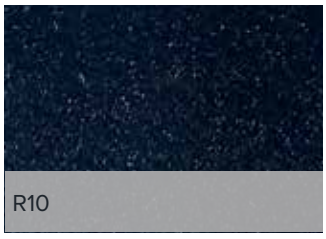
Metallic Colours

In addition to the standard RAL range (see note p.12), the following metallic colours are available for the shaft, the shaft panels, and the landing doors (both sliding and swing doors).


R06


R07


R09


R10

Glass Panels

The following options are offered when glass panels are used in the shaft and doors.

Transparent

Opaque

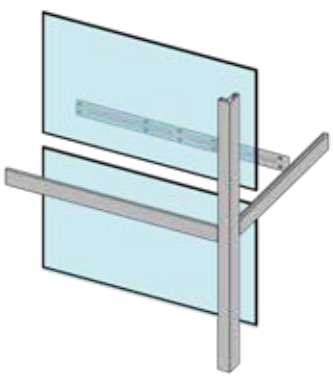

Semi-reflective

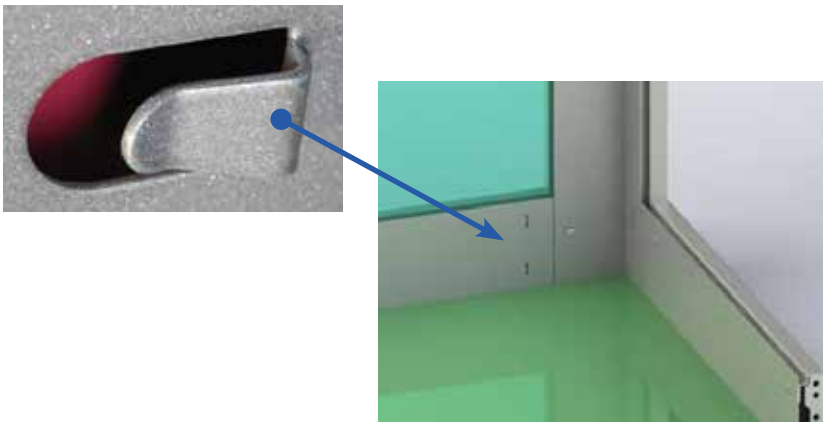

Smoky Grey


Smoky Satin

Easy-Snap System

A snap-lock fastening system provides quick and easy installation of the horizontal and vertical shaft frames, without the need for any additional fastening elements.





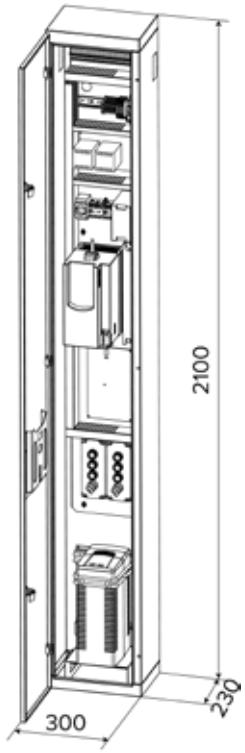
Shaft
ADDITIONAL INFORMATION

Optimised packaging

The lift packaging is optimised to reduce logistics costs and to minimise the risk of breakages during transportation. To reduce the amount of time and work needed at the installation site, the lift is prepared at the factory as follows:

- The lift is delivered with the main parts already assembled to reduce the installation time.
- Electrical cables are pre-wired and prepared with connectors.
- Small parts are packaged into separate and clearly identified boxes.
- T-guides are cut to measure, and are supplied in parts with a maximum length of 3000 mm.
- Shaft sections are supplied with a maximum length of 2500 mm.
- An installation toolkit to assist with safe and easy installation can be ordered.

Electrical cabinet



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

Optionally it can be positioned at the bottom floor next 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 when ordering.

Finishes:

- Standard: metal-like skinplate, for indoor application
- Options: Stainless Steel 304 Satin for indoor use only
  RAL paint of choice for indoor or outdoor use.

When used outdoors, the electrical cabinet should be placed in an area where it is protected from rain, or provided with a suitable cover, to avoid water infiltration into the cabinet.

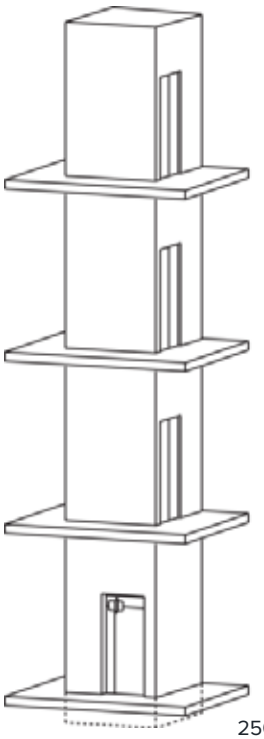
Dimensions: 300 x 230 x 2100 mm

Pit Requirements

The standard required pit depth is 140 mm. Where the cabin is prepared for the customer's own flooring, an additional 20 mm is required.

In cases with a concrete shaft where the access at the lowest landing is the only one on that side of the shaft, a 250 mm pit is required so that the door mechanism can be accessed during installation and maintenance. This situation is shown on the diagram to the right.

The Altura Diamond home lift must not be installed where accessible spaces exist below the shaft.



250 mm pit required

Drive
STANDARD FEATURES

The Altura Diamond runs on a gearless cogbelt drive system, offering near-silent travel, with superior comfort and performance.

The cogbelt has an offset double-helix design which smooths the passage of the belt over the pulley, reducing noise and vibrations. For the safety and comfort of all users, the following features are provided as standard on all lifts.

Usage cycle

The Altura Diamond is designed for low traffic and is suitable for residential or public buildings. The lift can run up to 60 travels per hour and will enter standby mode if the usage is exceeded.

Battery operated emergency lowering

If the power fails while the lift is between floors, the battery UPS (uninterruptible power supply) back-up system allows the user to move the lift downwards, open the doors and leave the lift by simply pressing any destination button on the control panel. The emergency lowering can also be activated externally from the landing control panel or from the service panel.

Battery protection

The UPS system continuously monitors the back-up batteries to ensure that they are not damaged and that they always hold enough power to run the lift in an emergency. If the back-up battery power level falls below a pre-defined level, the lift cannot be used and will switch itself off until the back-up power level is restored.

Soft start and stop.

A soft start and soft stop device ensures a smooth and comfortable ride. The soft start and stop settings are pre-programmed at the factory, but can be adjusted on-site if required.

Safety first

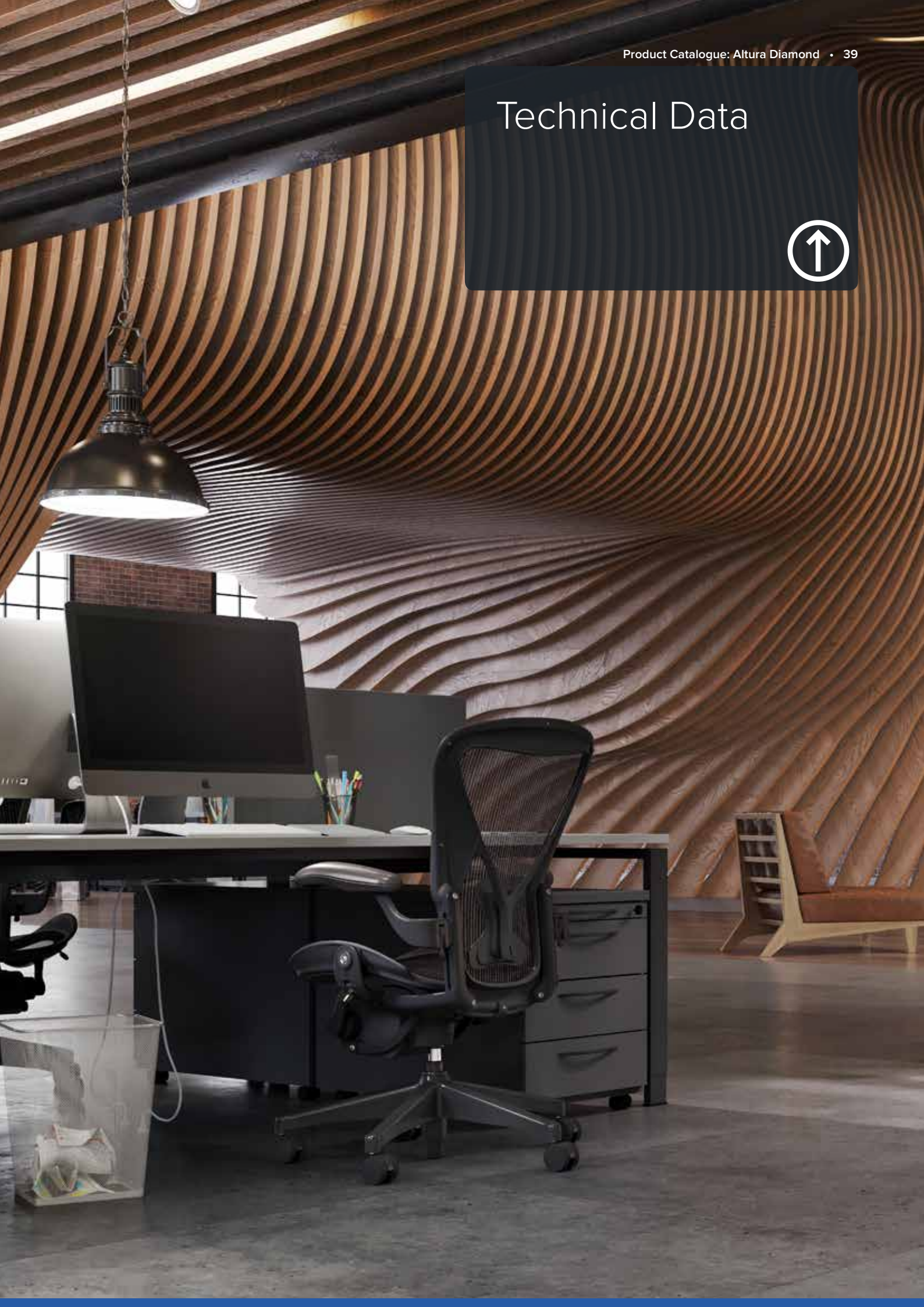
The Altura Diamond is fully certified to European safety standards. The electronic systems are SIL3 certified by a third party, exceeding standard regulatory requirements for the home lift market. For the greatest possible security, the over-speed governor and the brake are run on separate systems from the main drive.

An overload device prevents the lift from running if the maximum load is exceeded.

A-class energy rating

Standby consumption is below 50W and the Altura Diamond has an A-class energy rating.

Technical Data



Reaction Forces

Specific details regarding the forces are provided in the technical dossier for each lift order. The information given here indicates loads under typical climate conditions (wind, snow, temperature) and typical fixings of the lift to the building.

Lift type	Base plate / Area P dimensions
Type I (Narrow)	726 x 245 mm
Type II (Wide)	1125 x 245 mm

Reaction forces from the lift to the building floor:

- The force from the lift is uniformly distributed to the base plate in pit area P, and depends on the travel height and the model version.
- The force from the shaft is distributed to the four corner plates of the shaft structure area S and depends on the travel height.
- The maximum total force depends on the travel height.

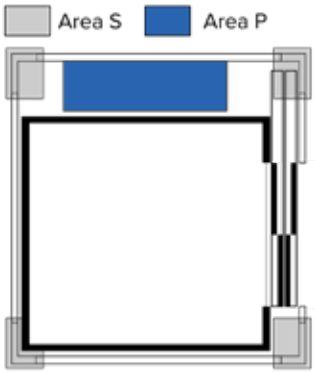
Load from the lift to area “P”

Travel (m)	BL41 Load (kN)	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)	Total (kN)	kN / corner	N/mm² / corner
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

BL41: max. speed 0.15 m/s. BL48: max. speed 0.4 m/s

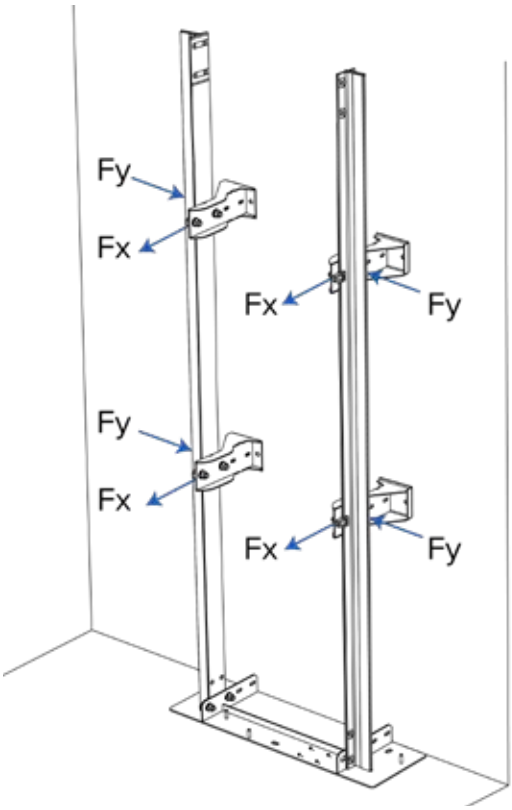


Reaction forces on the wall (rail side)

Concrete shaft

- The force is distributed to the wall through each crossbeam.
- The average vertical distance between each crossbeam is 1.1 - 1.5 m
- The maximum force applied to each fixing point depends on the lift speed.

Speed (m/s)	Fx guide side [kN]	Fy guide side [kN]
<= 0.15	2.6	0.9
> 0.15	4.7	1.6



Metal shaft

- Typically, the metal structure is fixed to the building every 2000 mm in height by means of expansion bolts.
- A wide range of fixing solutions is available to cover the most stringent applications.
- Under normal conditions, loads do not exceed 3 kN for each fixing point.

Further information can be found in the Fixings Guide.

Feasibility Information

GLASS CABIN WALLS & DOORS

A feasibility check is required when combining glass walls, doors and mirrors with other heavy elements such as stone-effect floor or external cladding panels.

There are no restrictions when combining finishes and optional items for cabins with a floor area smaller than 1.44 m² (nominal load 360 kg). For the purposes of the load calculations given here, glass refers here to any side of the cabin with a full or half-height window, glass door panels or mirrors.

The tables below summarise the available combinations based on European regulations. Outside Europe, local regulations may state a different minimum rated load, resulting in differences in the feasibility of panoramic sides.

✓ **Full availability:** Full availability, with no restriction on additional options.

? Check Required: The selected combination of floor size and glass panels may be available, but with restrictions on additional options. A feasibility check is required.

X Not available: This combination is not possible due to weight restrictions.

Simplicity cabin, 1 access

Floor Area	Cabin sides with glass		
	1	2	3
up to 1.3 m²	✓	✓	✓
1.3 - 1.44 m²	✓	✓	✓
> 1.44 m²	✓	✓	✓

Simplicity cabin, 2 accesses

Floor Area	Cabin sides with glass		
	1	2	3
up to 1.3 m²	✓	✓	✓
1.3 - 1.44 m²	✓	✓	✓
> 1.44 m²	✓	✓	?

Deluxe cabin, steel walls, 1 access

Floor Area	Cabin sides with glass		
	1	2	3
up to 1.3 m²	✓	✓	✓
1.3 - 1.44 m²	✓	✓	✓
> 1.44 m²	✓	?	?

Deluxe cabin, steel walls, 2 accesses

Floor Area	Cabin sides with glass		
	1	2	3
up to 1.3 m²	✓	✓	✓
1.3 - 1.44 m²	✓	✓	✓
> 1.44 m²	?	?	X

Deluxe cabin, laminate walls, 1 access

Floor Area	Cabin sides with glass		
	1	2	3
up to 1.3 m²	✓	✓	✓
1.3 - 1.44 m²	✓	✓	✓
> 1.44 m²	?	?	?

Deluxe cabin, laminate walls, 2 accesses

Floor Area	Cabin sides with glass		
	1	2	3
up to 1.3 m²	✓	✓	✓
1.3 - 1.44 m²	✓	✓	✓
> 1.44 m²	?	X	X

Feasibility Information
TYPICAL DIMENSIONS

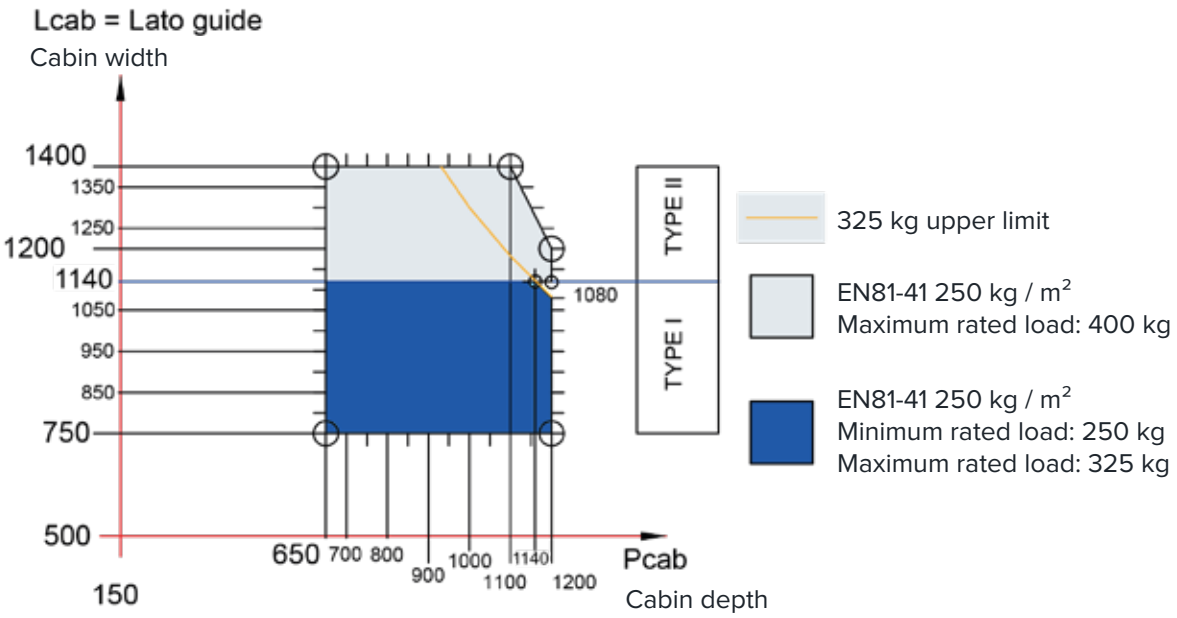
Narrow and wide layouts

The Altura Diamond is provided with two different layouts according to the cabin dimensions:

Lift Type	Distance between guides	Cabin width min - max
Type I (Narrow)	640 mm	750 - 1139 mm
Type II (Wider)	1000 mm	1140 - 1400 mm

The feasibility diagram below indicates the potential maximum rated load, according to the cabin dimensions and the type of lift.

Each Altura Diamond lift is designed to carry the minimum nominal load of 250 kg/m² in accordance with the EN code. If a higher rated load is required, this should be specified at the order stage so that the correct calculations can be applied.



Pre-defined plans

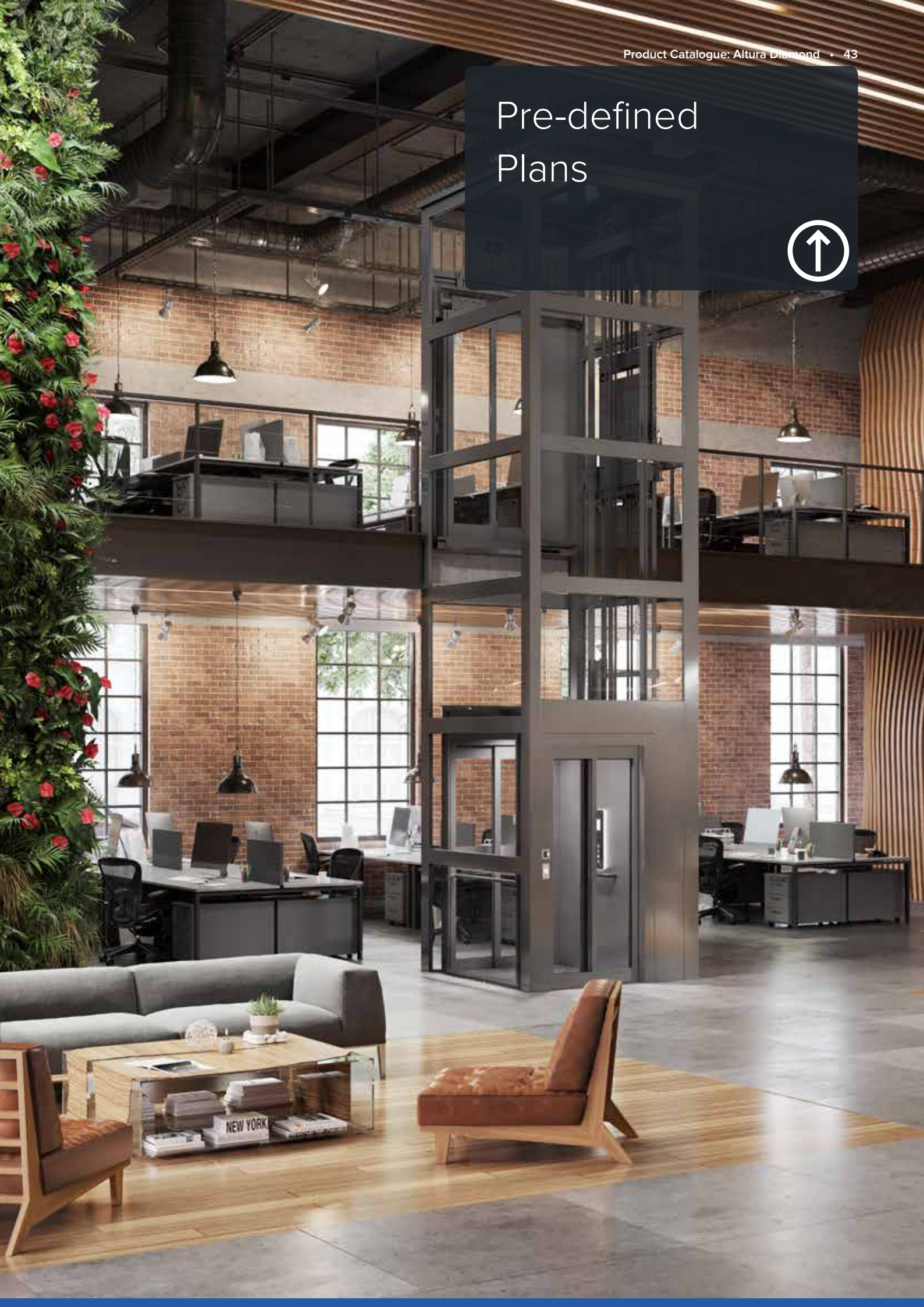
The following pages give a range of predefined plans, based on typical requirements, with pre-selected door layouts and types. These are offered as standard solutions.

Other dimensions and door configurations are possible, within the maximum and minimum sizes indicated in the diagram above. We can offer modular plan sizes, using the standard shaft structure elements, or completely customised made-to-measure plans. Modular plan sizes are available in a separate document. Please note that customised plan sizes have longer delivery times and additional costs. Dimensions and drawings for modular plan sizes and custom plans are available in a separate document.

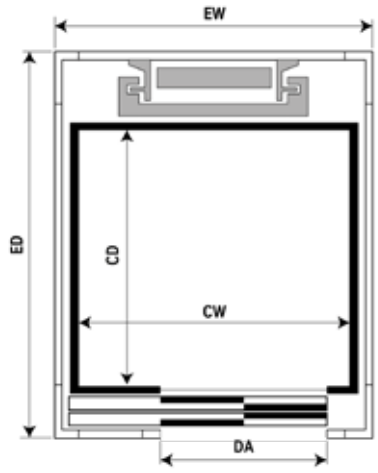
Oversized masonry shaft

As a general rule, the Altura Diamond can be installed in a masonry shaft that is larger than the dimensions given in the standard plans, provided that the maximum gap between the cabin and the shaft wall does not exceed 150 mm.

Pre-defined Plans



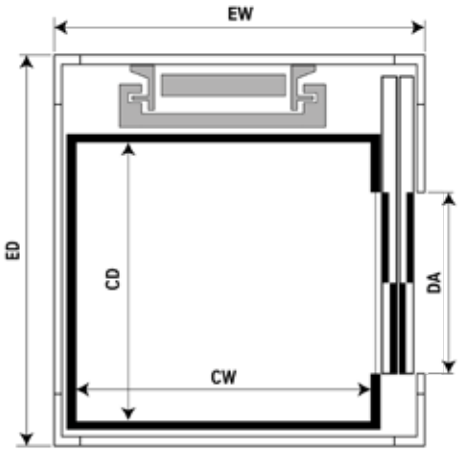
Metallic shaft with sliding doors



Unless otherwise stated, doors are lateral opening two panels (2P).
(4P) indicates four panel central opening. EN 81-41 configurations shown in grey. For nominal sizes of each product code, see p7

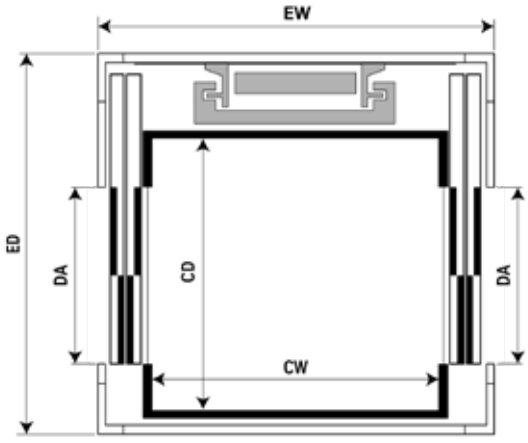
Frontal Access

	P1	P2	P3	P4	P5	P6	P7	P8
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	600 (2P) 700 (4P)	600 (2P) 700 (4P)	750	-	850	850	850
Rated Load	275	250	275	310	-	325	360	395



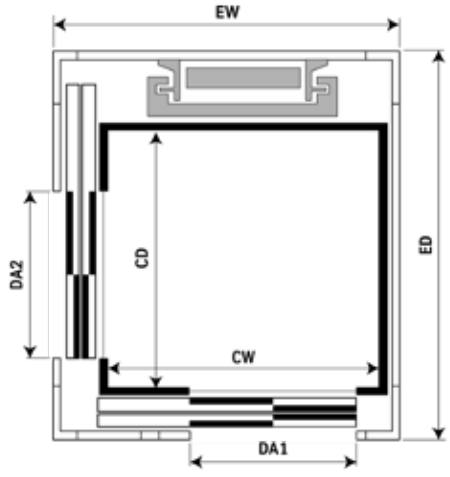
Lateral Access

	P1	P2	P3	P4	P5	P6	P7	P8
CW	900	1010	1010	1210	-	1410	1410	1410
CD	1200	800	1000	1035	-	920	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

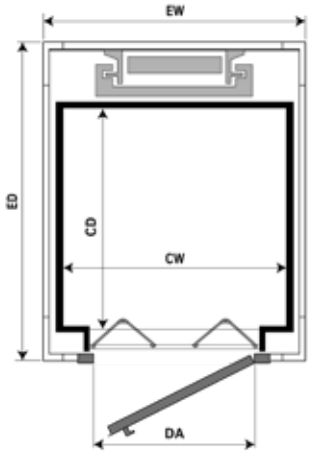
	P1	P2	P3	P4	P5	P6	P7	P8
CW	890	1040	1040	1240	-	1400	1400	1400
CD	1200	800	1000	1035	-	920	1035	1035
EW	1450	1600	1600	1800	-	1960	1960	1960
ED	1800	1300	1500	1550	-	1450	1550	1650
DA	900	650	800	800	-	750	800	900
Rated Load	270	250	260	325	-	325	365	400



Adjacent Accesses

	P1	P2	P3	P4	P5	P6	P7	P8
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 (4P)	750	850 (2P) 900 (4P)	900	900	900
DA2	900	700	800	800	850 (2P) 900 (4P)	750	800	900
Rated load	280	250	260	310	370	325	360	395

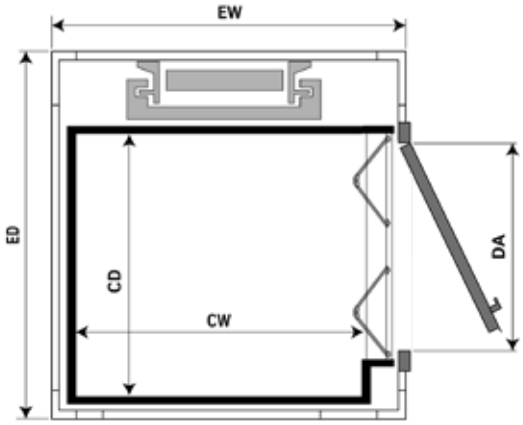
Metallic shaft with folding / swing doors



EN 81-41 configurations shown in grey.

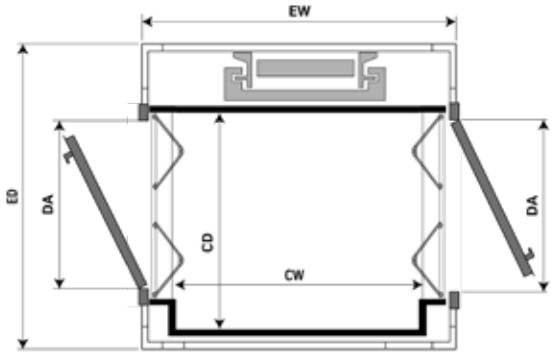
Frontal Access

	P1	P2	P3	P4	P5	P6	P7	P8
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



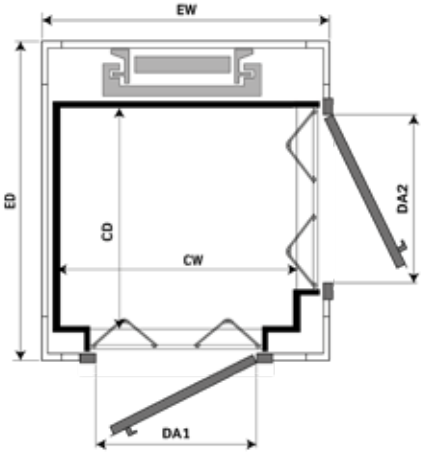
Lateral Access

	P1	P2	P3	P4	P5	P6	P7	P8
CW	900	1000	1000	1200	-	1400	1400	1400
CD	1195	810	1010	1040	-	940	1040	1125
EW	100	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

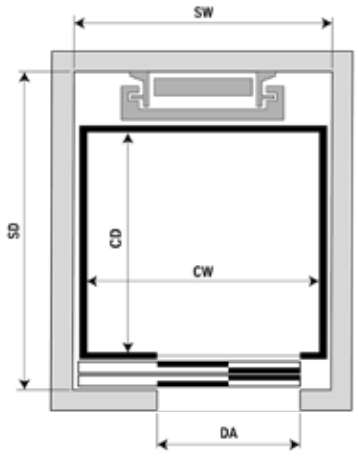
	P1	P2	P3	P4	P5	P6	P7	P8
CW	920	1020	1020	1220	-	1420	1420	1420
CD	1195	795	1085	1040	-	940	1040	1125
EW	1300	1400	1400	1600	-	1800	1800	1800
ED	1700	1300	1600	1550	-	1450	1550	1650
DA	900	650	900	850	-	750	850	900
Rated Load	275	250	280	320	-	335	370	400



Adjacent Accesses

	P1	P2	P3	P4	P5	P6	P7	P8
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

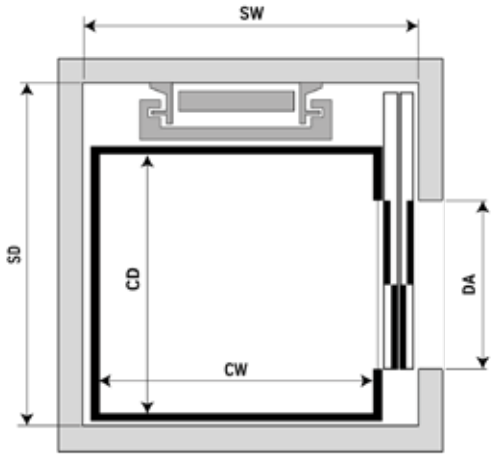
Concrete shaft with sliding doors



Unless otherwise stated, doors are lateral opening two panels (2P).
(4P) indicates four panel central opening. EN 81-41 configurations shown in grey.

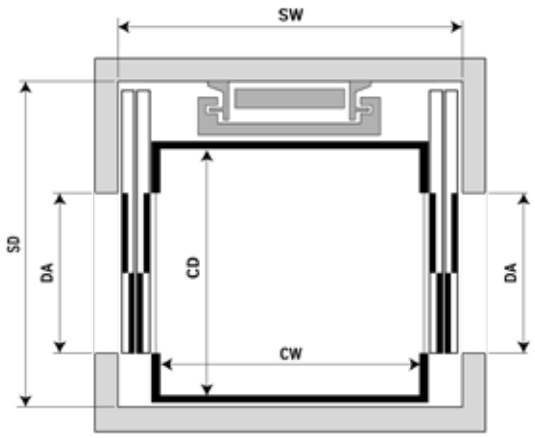
Frontal Access

	P1	P2	P3	P4	P5	P6	P7	P8
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



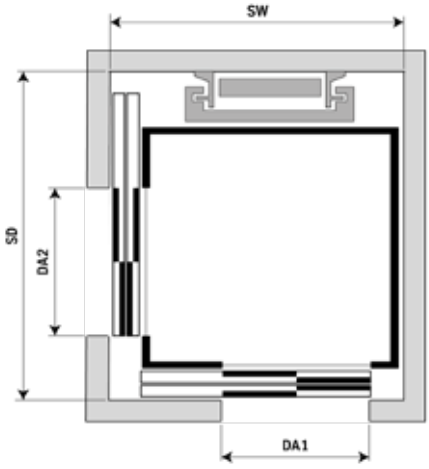
Lateral Access

	P1	P2	P3	P4	P5	P6	P7	P8
CW	900	1010	1010	1210	-	1410	1410	1410
CD	1200	800	1000	1035	-	920	1035	1135
SW	1210	1320	1320	1520	-	1720	1720	1720
SD	1635	1235	1435	1470	-	1335	1470	1570
DA	900	650	800	800	-	750	800	900
Rated Load	270	250	255	310	-	320	365	400



Opposite Accesses

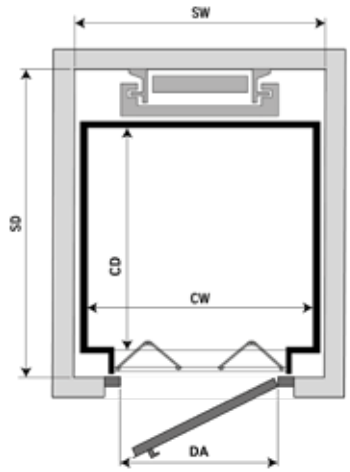
	P1	P2	P3	P4	P5	P6	P7	P8
CW	890	1040	1040	1240	-	1400	1400	1400
CD	1200	800	1000	1035	-	920	1035	1135
SW	1370	1520	1520	1720	-	1880	1880	1880
SD	1635	1235	1435	1470	-	1355	1470	1570
DA	900	650	800	800	-	750	800	900
Rated Load	270	250	260	325	-	325	365	400



Adjacent Accesses

	P1	P2	P3	P4	P5	P6	P7	P8
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	1815	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 (4P)	750	800	900
Rated load	280	250	260	310	370	325	360	395

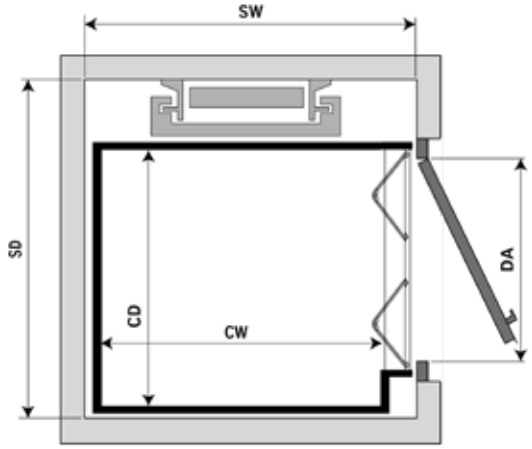
Concrete shaft with folding / swing doors



EN 81-41 configurations shown in grey.

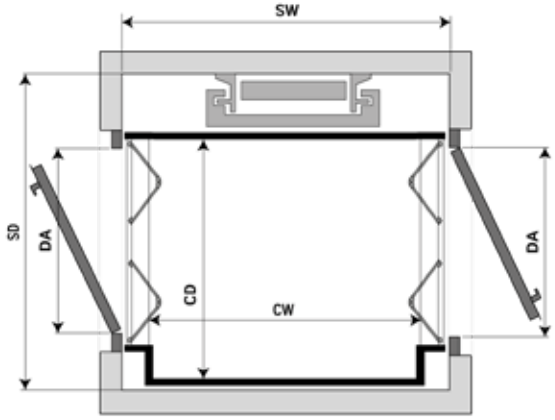
Frontal Access

	P1	P2	P3	P4	P5	P6	P7	P8
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



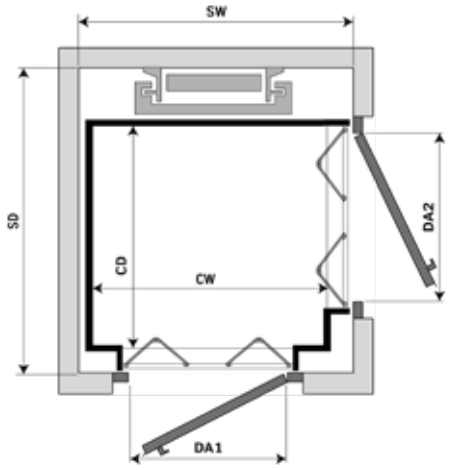
Lateral Access

	P1	P2	P3	P4	P5	P6	P7	P8
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

	P1	P2	P3	P4	P5	P6	P7	P8
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

	P1	P2	P3	P4	P5	P6	P7	P8
CW	900	1000	1000	1200	1200	1400	1400	1400
CD	1205	805	1005	1005	1205	905	1005	1105
EW	1120	1220	1220	1420	1420	1620	1620	1620
ED	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

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