



pve[®]
pneumatic
vacuum elevators



About PVE

PVE Europe is the European headquarters of Pneumatic Vacuum Elevators LLC, the designer and manufacturer of pneumatic vacuum elevators based in Medley, FL, USA.

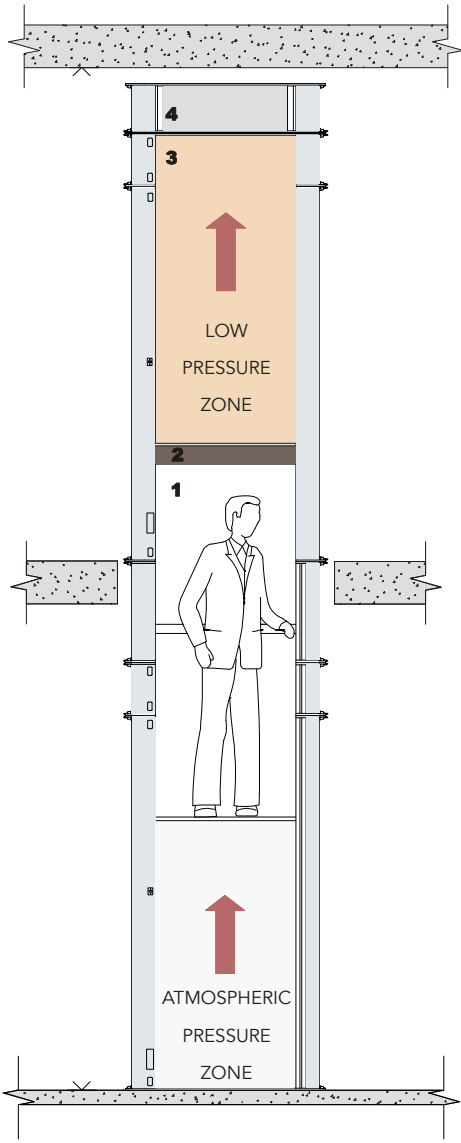
We are an innovative, technology-based company that has revolutionized how people and goods may be vertically transported within residential, marine and stage environments.

Founded in 2002, in Miami, Florida, the Company proudly manufactures three versions of its vacuum elevators, ranging from single to a three-passenger, wheelchair-accessible model.

PVE maintains an expanding network of more than 160 authorized dealers with 7,000+ units installed worldwide.



1. ATMOSPHERIC PRESSURE ZONE
2. CABIN SEAL
3. LOW PRESSURE ZONE
4. VACUUM PUMP



Operation

It is the pumps or turbines of the vacuum that pull you up to the next floor, and the slow release of air pressure that floats you down.

This self supporting vacuum elevator can operate up to 15m or five stops, with no pit or hoist-way required.

There are three main parts to this transparent vacuum elevator:

1. The outside tube which is made up of an aluminum frame and polycarbonate walls.
2. The steel cabin including brakes and safety mechanisms.
3. The upper Control Compartment, which houses the motors and the controller board.

Vacuum Motor Configurations

Head Unit - Standard

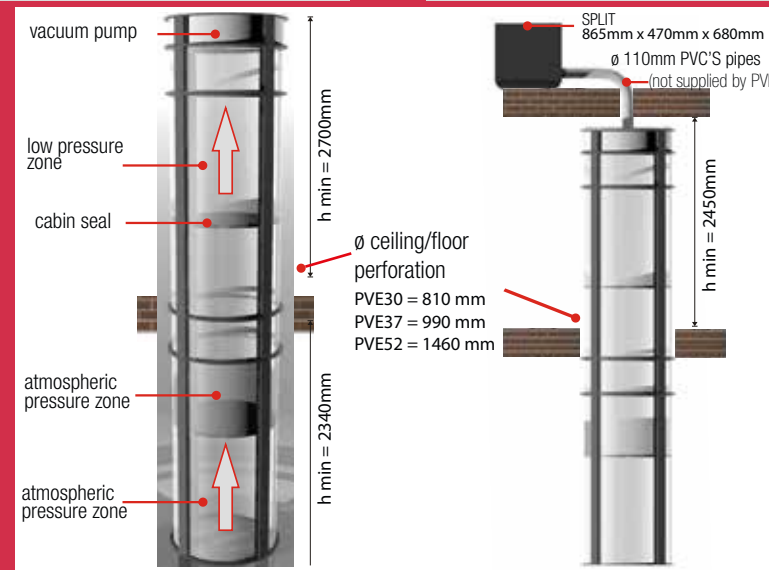
In the head unit configuration, the vacuum system is located directly on top of the upper floor vertical cylinder of the pneumatic vacuum elevator.

The electrical control panel is inside, and the only installation requirements are to connect to a 220v outlet near the machinery.

This format is best in homes that have sufficient height on the top floor.

(Minimum height for installation 2700mm)

Split Unit Model



In the split unit configuration, the vacuum system is located in a split box that can be installed at a distance of 10 meters from the top of the elevator.

The split system piping is connected to the top of the cylinder via two 110mm diameter PVC pipes.

This format is required when the height of the top floor is less than 2700mm.

(Minimum height for installation 2450mm)

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Models

PVE30

External diameter
750 mm



Rated Load
159 kg



Free space required for installation
800 x 800 mm

PVE37

External diameter
933 mm



Rated Load
205 kg



Free space required for installation
950 x 950 mm

PVE52



External diameter
1316 mm



Rated Load
238 kg



Free space required for installation
1350 x 1350 mm



Benefits



Minimum work.
No pit or machine room required.



Easy, quick and clean installation within 1-2 days



Vacuum Technology



220Volt single phase



Absolute Safety



Machinery Directive 2006/42/EC



ECO-Friendly.
powered by AIR



Panoramic and round desing. 360° visibility



Minimal Maintenance



Full Space.
Maximum exploitation from space available

Two, three, four and five stops (15m total rise)

No pit or machine room

The pneumatic vacuum elevator is the only domestic lift that is installed directly on the existing floor home. Not even a minimum pit is required.

Cost-effective approach

Cost-effective approach for elevator installation. Ideal for new and existing homes due to the minimal space required to accommodate the elevator.

Unique design

Fully transparent and panoramic view without cables or pistons that block vision.

Absolute Safety

In case of a power failure since the moving car automatically descends to the lowest level and the electro-mechanical door will open to let the passenger out.











Options & Upgrades

Colours:

- Navy Gray (Standard) 
- White (Standard) 
- Black (Special) 
- Light Gray (Special) 
- Taupe (Special) 

Door Openings Configuration:

- | | Ground Floor | Upper floor(s) |
|-----------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| - In Line 0° |  |  |
| - Opposite 180° |  |  |
| - 90° Right |  |  |
| - 90° Left |  |  |

Possibility of alternating orientation between floors

All upper floor doors must be same side as one another.


































Cabin upgrades

- Car key lock
- Foldable car seat

PVE30

PVE37

PVE52

 Available

 Not Available

Technical Specifications



General (* Technical data subject to change. PVE reserves the right to change the information in this document without prior notice).

- External cylinder
- Rated Load.....
- Speed
- No pit required. Bottom level floor must be 100% level as elevator rests on existing floor
- Minimum overhead clearance:
 - Standard Head Unit
 - Split Unit
- Penetration required to install through floors and ceilings

Mechanical Requirements

- 220V, 60/50Hz, single phase power supply
- Total maximum power

Cabin

- Entrance width opening
- Internal cabin height
- Internal cabin diameter:
 - between columns
 - Without columns
- Automatic LED lighting and cabin fan
- Door height
- Height to top of Door Closer
- From inside the cabin, all doors are hinged on top
- Electrical circuits with all controls in cabin
- Push button call controls with precise leveling at each landing. Alarm button included. Touch type
- Telephone

Safety

- Automatic descent to ground level at safety speed in the event of a power failure
- Overload relief valve
- Mechanical emergency brakes within 5cm of freefall in vacuum loss or catastrophic failure
- Warranty
- CE Certified by the Liftinstituut. Machinery Directive 2006/42/EC

PVE30

PVE37

PVE52

750 mm	933 mm	1316 mm
159 kg	205 kg	238 kg
0.15 m/s	0.15 m/s	0.10 m/s
✓ ⚠	✓ ⚠	✓ ⚠
2700 mm	2700 mm	2700 mm
2450 mm	2450 mm	2450 mm
810 mm	990 mm	1389 mm
25Amp	32Amp	35Amp
3 kW	5 kW	6 kW
508 mm	521 mm	813 mm
2007 mm	2007 mm	2007 mm
560 mm	750 mm	1090 mm
640 mm	820 mm	1210 mm
✓	✓	✓
1970 mm	1970 mm	2025 mm
2020 mm	2025 mm	2071 mm
Left	Left	Left
24 V	24 V	24 V
Automatic	Automatic	Automatic
✓	✓	✓
✓	✓	✓
✓	✓	✓
2 years	2 years	2 years
✓	✓	✓

Installation Requirements



1. Minimum height required at the ground floor:
2. Minimum height required at the upper floor:
 - Head Unit
 - Split Unit
3. Diameter of finished through floor hole must be:
4. In no case must the perforation of the ceiling be less than (from the wall)
When installing a 3 or 4 floor elevator, all openings' circular perforations should be perfectly aligned.
5. Bottom level floor must be 100% level as elevator rests on existing floor
6. There must be an opening to make way for the cylinders of (check the measure) in diameter and of 2340mm length down to the ground floor. This access may be through door or window openings.
 - Cylinder diameter
 - Cylinder length
7. Install a hook at the ceiling where the elevator is to be installed to lift the cylinders. If it is impossible to install this hook, the minimum height at the last level shall be at least 2700mm. Weight to bear

ELECTRICAL

8. Single phase through an independent line. The electric feed shall be
9. Exclusive ground connection for the elevator
10. Thermo-magnetic switch
11. Line of conductors of (RECOMMENDATION)
12. Electrical supply location
 - Head Unit:
 - Split Unit:
13. Telephone connection



220VAC (no exceptions 220VAC must be provided, 210VAC or 230VAC is not acceptable, if installation does not have 220VAC on a regular basis, a voltage regulator or transformer must be installed by home owner). Voltage fluctuations are not covered by the warranty.







When installing the elevator, consider the total dimensions, as a small room will generate a higher noise level. Therefore, it is not advisable to install the split motor in a very small facility.

PVE30

PVE37

PVE52

..... 2340 mm .....	..... 2340 mm .....	..... 2340 mm
..... 2700 mm .....	..... 2700 mm .....	..... 2700 mm
..... 2450 mm .....	..... 2450 mm .....	..... 2450 mm
..... 810 mm .....	..... 990 mm .....	..... 1389 mm
..... 120 mm .....	..... 120 mm .....	..... 150 mm
.....   
..... 800 mm .....	..... 950 mm .....	..... 1350 mm
..... 2340 mm .....	..... 2340 mm .....	..... 2340 mm
..... 500 kg .....	..... 500 kg .....	..... 800 kg
..... 220 V .....	..... 220 V .....	..... 220 V
.....   
..... 25 A .....	..... 32 A .....	..... 35 A
..... 6mm ² .....	..... 6mm ² .....	..... 6mm ²

..... to be near the head (elevator's top portion)

..... to be near the PVE Control Panel

..... to be near the electrical power supply



Essential for proper installation.



NOTICE. Important requirement

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Installation Requirements



In addition to all the points before, when the installation is SPLIT unit configuration:

- 14. Minimum required height at the upper floor:
 - Split format
- 15. Required space for remote location of split unit in attic or adjacent closet - Split:
- 16. Remote location of split unit can be accommodated up to
- 17. Split unit connections require two 110mm PVC pipes to run the distance from the top of the upper floor cylinder split plate to the remote location of the split unit.

ELECTRICAL

The same as the head unit vacuum motor configuration, plus:


- 18. Four cables from the location of the split to the location of PVE Control Panel. Section:



PVE30



PVE37

PVE52

The requirements are the same for the three models

- 2450 mm
- 865 mm (length) x 470 mm (depth) x 680 mm (height)
- 10 linear meters from the top of the elevator
- 

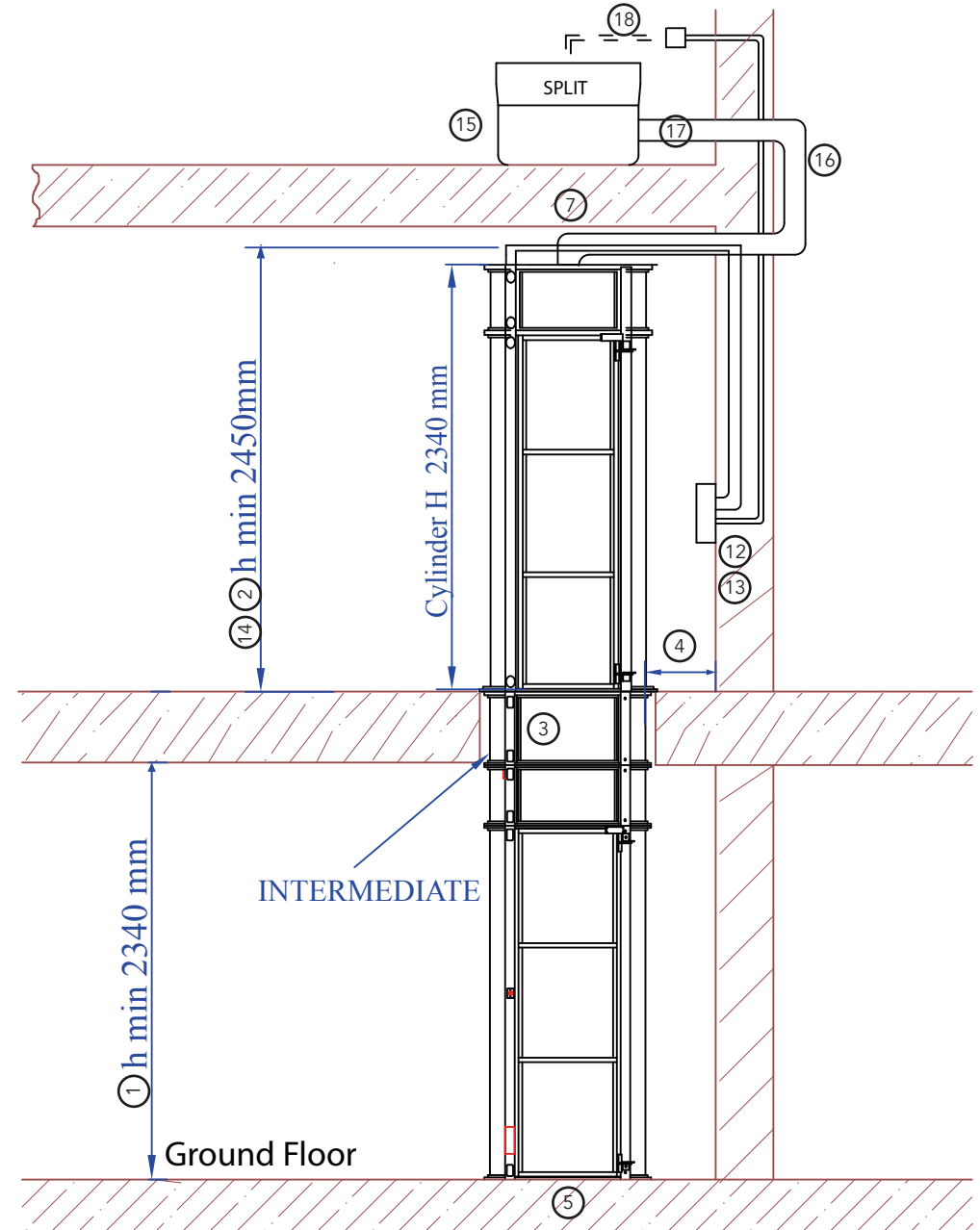
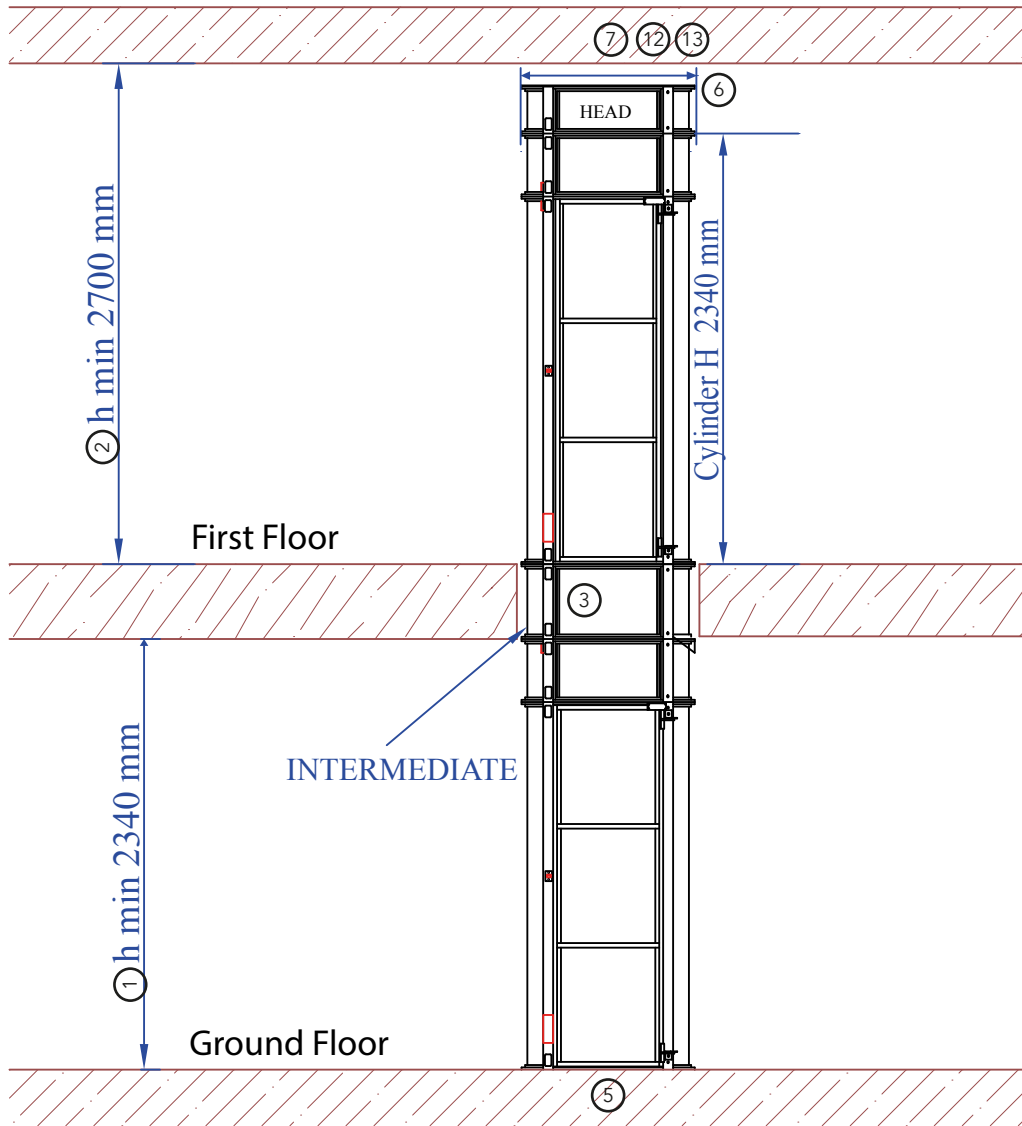
-  The split should be located in a safe, accessible and properly lit in order to to facilitate future revisions by maintenance company, installer or manufacturer.
-  Air supply to split unit has to be drawn from interior of residence (proper housing of split unit and air duct to interior of home required)

-  Essential for proper installation.
-  NOTICE. Important requirement

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Typical Setups

Example of Installation: head format (left) and split format (right).
Installation Requirements marked with numbers.



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