

1.- UniLift introduction.

The **UniLift DHM-500** supplied by **Elevator Trading** is the ideal solution both for installation to a house under construction or for retrofit into existing houses in order to facilitate daily life to enable people to stay in their own home even not being physically handicapped. The **UniLift DHM-500** can be installed both indoors and outdoors.

The complete system may include two elements:

I. UniLift DHM-500

- ☛ Connection to 230 VAC or 400 VAC
- ☛ For up to **500 kg.**
- ☛ Minimum space requirements (depth of the pit only 80 mm, (up to 385 kg.) headroom requirements in the top floor only 2,50 m)
- ☛ Battery backup
- ☛ Hydraulic operation
- ☛ Low power consumption
- ☛ Very advantageous proportion of cabin size and exterior dimensions of the lift shaft

Certificate N° 01/205/0717/10 by TUV Rheinland, tested according to the Machine Standard Directive 2006/42/EC, Article 12, Paragraph 3b, and requirements defined in Annex I.

II. Lift Shaft System (optional)

- ☛ Self supporting
- ☛ Easy installation without any mess, elements to be screwed together.
- ☛ Modular structure adapts to any requirements.



Technical Data

Rated Load	Max. 480 kg.
Speed	0,15 m/s.
Travel (maximum)	14 mts.
Minimum Pit required	80 mm. (200 mm. if reinforced car frame)
Minimum Headroom required	~ 2.500 mm. (if no door operator)
Power Supply	230 Vac. or 400 Vac. (2,2 kW)
Working pressure	75 ÷ 100 bar.
Operation	Continuous pressure (from cabin) Automatic from landings. Full automatic if enclosed cabin.







2. Cabin

I. Cabin Size & Access



<i>Interior dimensions of cabin:</i> CUSTOMIZED	
<i>Maximum car depth (D) :</i>	Variable and limited to 2,0 m2 (EN81.41)
<i>Maximum car width (C) :</i>	1.200 mm. (traction side)
<i>Height of the cabin (free) :</i>	2.035 mm (other dimensions on demand)
The cabin of Unilift can be furnished with maximum three open sides. Entrances standard dimensions: 600, 700, 800, 900 mm.	
NO cabin door is allowed (standard). EN81-41 Entrance control with Infrared Curtain (Type 2 – EN81.41)	
BUS folding or Automatic car door (options) : 600, 700, 800, 900 mm.	

II. Cabin Decoration & Controls.

FireBrick (≅ RAL 3011)		Mirror: <ul style="list-style-type: none"> On the traction wall. (upper half of cabin height) (*) 	
		Walls: <ul style="list-style-type: none"> Melamine panels (*). Glass or Stainless Steel (GP-180 finishing) as option. 	
Soft Gold (≅ RAL 1015)		Floor: <ul style="list-style-type: none"> Anti-slip flooring (grey PVC) (*) Stainless steel skirting (*) 	
		Operating controls: <ul style="list-style-type: none"> DMG BL-light push buttons integrated into a column stainless steel support, EN81.70 engraving. (one push button for each floor and one for alarm) (*) Key-switch to lock / unlock service. (*). 	
Pigeon Blue (≅ RAL 5014)		Cabin Lighting: <ul style="list-style-type: none"> Epoxy painted pierced steel plafond (White/Black) (*) Stainless Steel plafond as option. Lighting, integrated in the cabin ceiling (*). Light turns on automatically when the landing door is opened and stays on as long as the lift is running. 10 seconds later it is turned off automatically. In the event of a power failure, Emergency lighting system (Battery powered).(*) Halogen Spots (option) Other lighting configurations as an option. 	
			Hand -rail. <ul style="list-style-type: none"> Nickel-plated (*) Stainless steel (option)
Pale Grey (≅ RAL 7035)		Other special features available on demand	
Maple Woodline			
Light Cinnamont			

(*) included in standard configuration

2. Technical Specifications

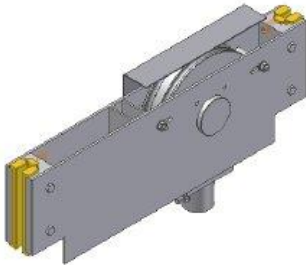
Control System



UniLift DHM-500 can be supplied either with a 400 Vac. (three phase) or 230 VAC (monophase-standard) motor.

- **Sirius III** Microprocessed Control panel, programmed individually for each installation.
[dimensions 450 mm.(w) x 250 mm.(d) x 450 mm.(h)]
- **Pre-wiring** with complete electrical installation including **travelling cable & shaft accessories**.
- Protection of the casing: IP 52

Traction

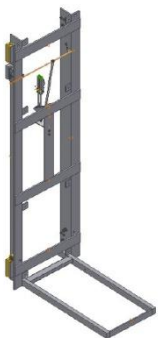


- **1 : 2 roped cantilever car-frame** (reinforced for more than 1.100 mm. in any cabin dimension)
- Hydraulic drive with **BLAIN KV1S + KS** valves group.
 - **Motor 2,2 kW / 3 ph. 400 VAC** or 230 VAC
 - Dimensions (max) : 725 mm. (w) x 650 mm.(d) x 1.100 mm. (h)
- **T 70 / 65** or **T82/68** guide-rails (in accordance with rated load)
- 2 x 10 mm. Ø or 2 x 12 mm. Ø **ropes**.
- **4 mts. of hydraulic hose** between the hydraulic cylinder and the hydraulic unit. Optionally a longer hose is available (max. 10 mt).
- **Shut Off valve**, to allow interrupting the oil duct. (For maintenance purposes).
- **Indoor** or outdoor installation (with shaft structure – optional)

Metal cabinet (EN81.41)

- Powder coated **metal cupboard** to host inside the hydraulic Pump & Control system (mandatory by EN81.41 if no room machine available).
- Door opening direction adjustable on site to suit the local requirements.
- Dimensions: **725 mm (w) x 650 mm (d) x 1800 mm (h)**

Safety features



- Safety Infrared Barrier of category II according to EN 81.41 in the cabin entrances (if NO door is installed)
- Mechanical gripping device on both rails
- Integrated testing device for the gripping device
- Safety rupture valve (**GMV**)
- Battery powered Emergency descent system. (alternatively, manual drive)
- Automatic emergency lighting in the cabin.
- Alarm siren and telephone set (no automatic dialing).
- Safety prop in the pit for installation and maintenance work with device for folding. (Out and folding to be operated from outside of the shaft, with integrated safety contact).
- Landing doors with additional safety contact with RESET control.

Required area

UniLift DHM-500 requires only a small area.

The minimum dimensions are (door 600 mm):

- With Lift Structure : 1.120 mm (w) x 790 mm (d)
- Without Structure : 930 mm.(w) x 700 mm.(d)

(see shaft configurations in Annexes 1 to 6)

Installation

UniLift DHM-500 may be either installed in an existing lift shaft or supplied with the Lift Shaft System (see next pages).

Doors:

Car door: In accordance with **EN81.41**, **UniLift** DHM-500 may NOT include cabin door.
(**BUS** or **AUTOMATIC** door is an option).

Landing doors: Standard hinged doors, 600, 700, 800, 900 mm wide.
(**AUTOMATIC** door is an option)

Standard characteristics:

- **Semi-automatic** door (prime coated), with closing spring & door damper.
- Electromagnetic **noiseless retiring cam** and emergency unlocking
- **Window** with wire-reinforced glass panel (78 mm. x 1.240 mm) and door handle
- Landing push button panel in door frame with push button and **key-operated switch**.

Non-standard design landing doors can be supplied as an option:

- Large windows, (i.e. 900 mm clearance with Window = 510 mm x 1610 mm).
- For exterior use, hot galvanized and powder-coated.
- Automatic doors, finished in Epoxy painting, Stainless Steel or Glassed.

3. Lift Shaft Structure (Optional)

Description



The modular Lift Shaft Structure offers some **essential advantages:**

- Easy installation, keeps to a minimum because all components of the System are bolted together.
- Modular and flexible. Customized design capabilities.
- External installation is also possible. Thus optimising simple coordination with the design of the installation site.
- Very favourable ratio of cabin size and exterior dimensions of the shaft.
- Solid, self-supporting system.

Indoor installations :

Material:

Frame structure: steel
Panels and roof: sheet steel
 Finishing: **Epoxy powder coated.**
RAL 1013, 5010, 7032, 7035, 7042, 9002, 9003, 9005.

Outdoors :

Material:

Frame structure: steel, hot galvanized.
Panels and roof: steel, hot galvanized.
 Finishing: **Polyester powder coated**
RAL 7032, 7035, 7042, 9002, , 9005.

Design :

- Closed sheet steel panels (standard)
- Drilled steel plates (option)
- Prepared for Glass panels (Safety Glass to be provided by others)
- Flat roof (basic design). Other designs available upon request.

Characteristics



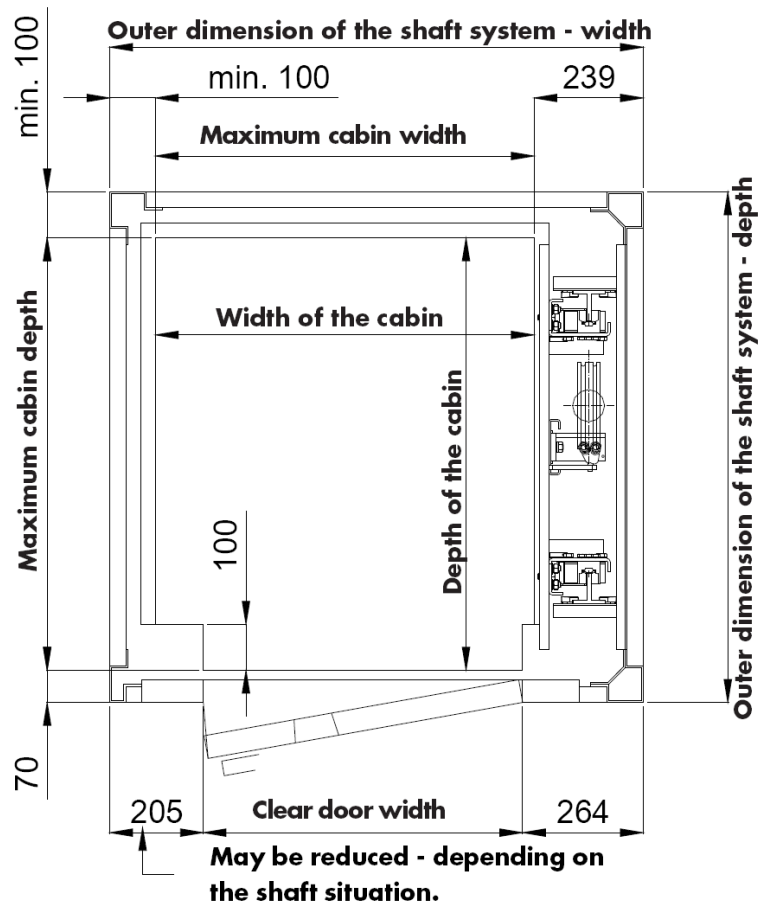
4. Standard models

Model	One entrance		Two entrances		dimensions
	Front	Side	90°	180°	
Type 1	X				Annex 1
Type 2		X			Annex 2
Type 3		X			Annex 3
Type 4			X		Annex 4
Type 5			X		Annex 5
Type 6				X	Annex 6

5. Dimensions

However the standard models defined in the previous table and understanding the special shaft requirements for this type of lifts, the design and production of the **UniLift** system is **customized**.

Should none standard model meets the shaft dimensions, those indicated in the drawing beside are just an indication for project calculations. It enables you to calculate the approximate required shaft dimensions with a defined cabin size or what cabin size might be achieved with a determined lift shaft.

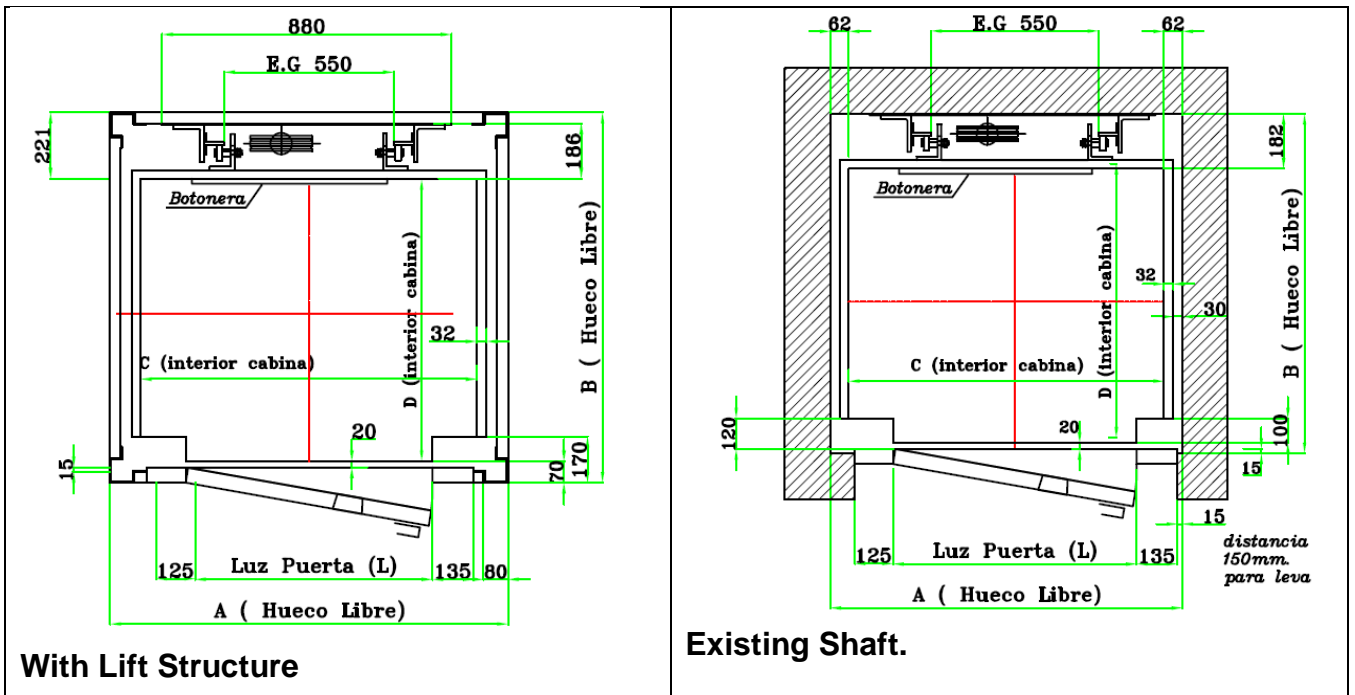


Minimum Shaft / Room dimensions (dimensions not valid for projects):

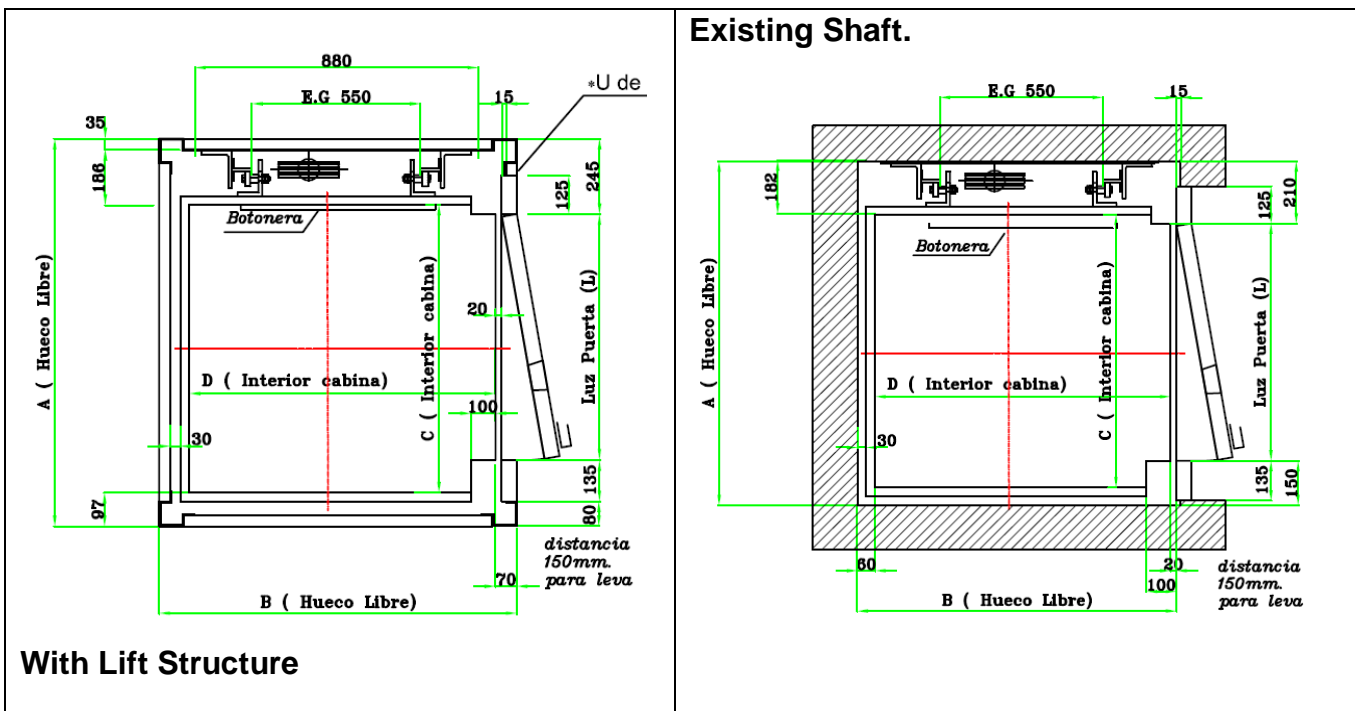
Without Lift Structure. Width of the Shaft (A) = Width of the cabin (C) ± 124 mm.
 Depth of the Shaft (B) = Depth of the cabin (D) ± 202 mm.
 (doors embedded in wall shaft)

With Lift Structure. Width of the Room (A) = Width of the cabin (C) ± 214 mm.
 Depth of the Room (B) = Depth of the cabin (D) ± 291 mm.

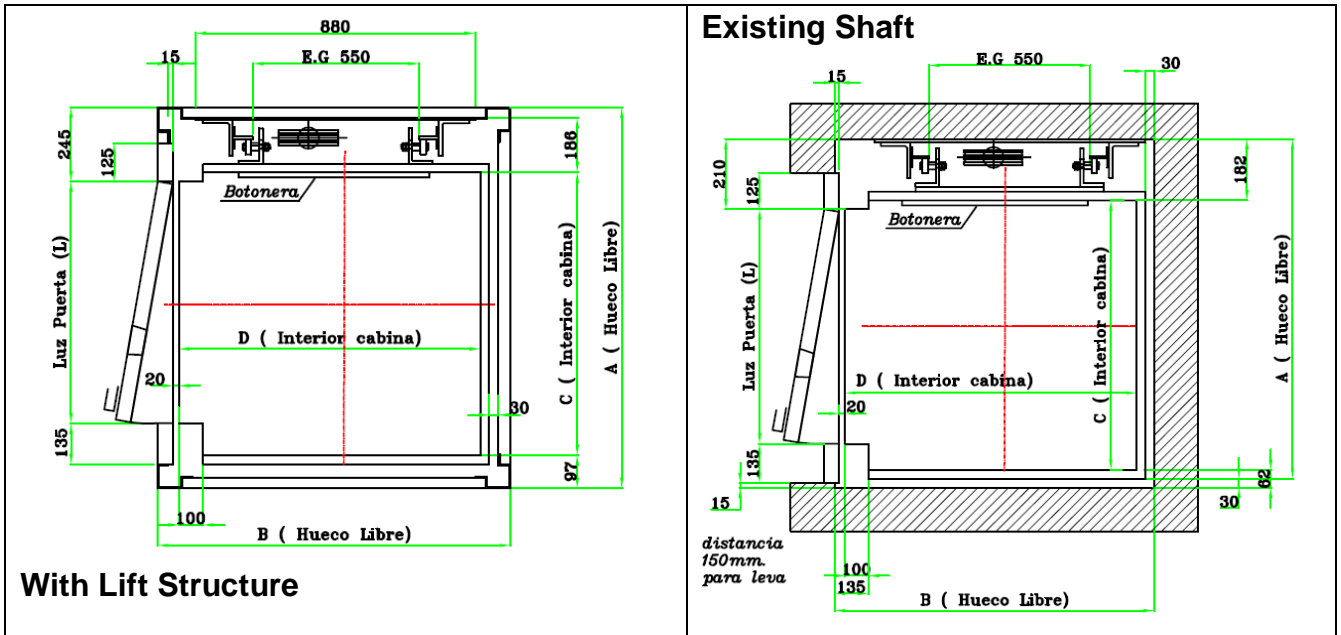
ANNEX 1 (Type 1)



ANNEX 2 (Type 2)



ANNEX 3 (Type 3)



ANNEX 4 (Type 4)

