

CARDOK MULTI TRIO with Rigid Chains technology

Triple your parking space

High-Tech, Fast, Discreet, Secure, Bespoke

Installation for private houses, buildings, hotels, offices, ...



## Characteristics:

	Standard	Option
Lower platforms load:	3000kg per platform	3500kg / other
Upper platform load:	3000kg	3500kg / other
Dimensions available for lower platforms:	2600 x 5300mm	2800/5800 / other
Dimensions available for upper platform:	2800 x 5500mm	3000/6000 / other
Available height:	4330mm	5000 – 6000 / other
Lift speed:	0.12m/s	0.15m/s

## Concrete pit (built by customer)

The thickness of the walls needs to be defined by an engineer depending on the quality of the land. The walls of the pit must be formed of concrete and must to be perfectly flat and vertical without any protrusions.

The weight of the entire installation together with the maximum load is borne by the concrete pit floor in 4 areas of 400 x 400mm. The static force of each of them is +45kN. The size can be increased, upon demand.

Concrete quality according to the static requirement of the building but for the dowel fastening we require a concrete quality of min. C20/25.

It's important to ensure that the pit edge remains watertight to avoid water entering the concrete cast. This can be achieved with asphalt for example.

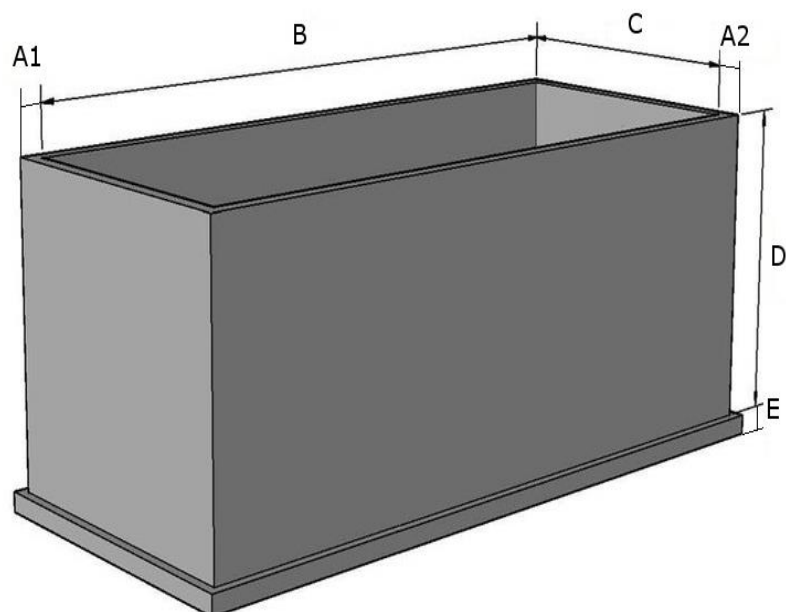
If the land has low permeability, we recommend installing a draining system.

Provision of a watertight passage is necessary for electrical supply of min. 80mm in diameter.

Provision of a watertight passage is necessary for water drainage. (see "drainage")

(made to measure, all dimensions can be changed upon request and upon acceptance by Cardok)

- A1 : to be defined by the engineer
- A2 : to be defined by the engineer
- B : standard 5360mm
- C : standard 2700mm
- D : standard 5235mm
- E : to be defined by the engineer



## People transport

As an option, the lift can be designed to allow the driver to remain in the car in accordance with the EN81 norm.

## Drainage (to be performed by the customer)

A circular gutter system around the upper platform will prevent water entering the pit. Need to install draining pipes in each corner.

For locations with particularly exposed conditions we recommend an additional drainage channel around the outside pit.

Need to install a drainage grid at the bottom of the pit. Where this is not possible, it's necessary to create a slope and a drainage area to install a small sump pump. The necessary dimensions are min 300x300mm and 200mm deep.

To prevent any possibility of contamination of the ground water we recommend giving the pit floor an oil resistant coating as a means of protecting the environment and to facilitate cleaning.

## Installation

The client needs to provide a fixed or mobile crane which will serve to install the system in the pit as well as to unload the truck. Min. hook height and weight requirements are min. 10m / 6t. (Depend of the site configuration)

## Security (with option "People transport")

It is necessary to install manual or automatic garage doors in the underground, coordinated with Cardok Multi Trio to prevent access to the platforms when they move up or down. We can propose suitable garage doors, upon request.

## Finish (to be performed by the customer)

The lower platforms are finished in ribbed aluminium.

The finishing of the upper platform is up to the customer's wish and is not included in the price. We recommend a coating matching the surrounding land which can be asphalt, tiles, gravel, grass or aluminium. It must be determined before the system is built as the weight and the thickness of the coating needs to be considered. The standard coating will be 40mm thick and its weight will not exceed 75kg/m<sup>2</sup>. Other options are possible upon request.

## Electricity

Power supply must be provided by the client and must be done by a qualified electrician.

400VAC / 20A (without options) 3PH+N+ PE (three-phase current) protected by FI

Power of the electrical motor: 18kW to 37kW (depending on the lifting height and speed)

One electrical box must be installed on the ground floor, to install the control panel with an emergency switch and key push buttons to lift or lower the platforms. It must be installed close to the lift.

## Noise

The lifting system produces very little noise.

## Light

There are LED lights installed on the lower platforms.

If the technical zone is installed away from the concrete pit, it is necessary to install additional lights for maintenance.

## Ventilation (to be performed by the customer)

We recommend providing a ventilation system in consultation with heating/ventilation/air conditioning engineers with the aim of obtaining continuous air exchange, reducing air humidity, preventing condensation and reducing moisture from cars (rain, snow, ice etc.).

This helps considerably to reduce or to prevent corrosion and malfunctions due to corrosion.

## Maintenance

Regular maintenance by qualified personnel can be provided by means of an Annual Service Contract.

## Temperature

The installation is designed to operate between  $-25^{\circ}\text{C}$  and  $+50^{\circ}\text{C}$ . Atmospheric Humidity: 50% at  $+40^{\circ}\text{C}$ .  
The electrical control panel must be installed in dry local between  $+3^{\circ}\text{C}$  and  $+30^{\circ}\text{C}$ .  
Systems are designed for snow load zone II with up to  $0.75\text{ kN/m}^2$  in accordance to DIN 1055-5.  
If the local circumstances differ from the above, please contact us to provide it.

## Conformity test

All our systems are checked according to EC machinery directive 2006/42/EC and EN 14010.

## Notes

In case higher loading is required e.g. passage for fire brigade or delivery fuel oil, please contact us.

The manufacturer reserves the right to modify or alter above specifications.