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# **Elevator Documentation**

***Release 1.1***

**Nikita Kovin**

**Jan 22, 2018**



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This guide is intended for passengers of the DenvEL-4500 elevator. The document contains a description of the elevator and provides instructions on how to use it.



# CHAPTER 1

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## About DenvEL-4500

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DenvEL-4500 is a modern high-speed passenger elevator. It carries people between floors of a public or residential building.

DenvEL-4500 consists of two main components:

- The car—a cabin for passengers
- The hoistway—a shaft in which the car moves up and down

### 1.1 Technical characteristics

DenvEL-4500 has the following technical characteristics:

- Rated capacity—1200 lbs (6—7 adult people)
- Maximum speed—1500 ft/min
- Maximum travel—980 feet

### 1.2 Why DenvEL-4500?

This section explains why you should prefer DenvEL-4500 over stairs and other manufacturers' elevators.

#### 1.2.1 DenvEL-4500 is comfortable

We designed DenvEL-4500 to provide a ride with maximum comfort for passengers:

- The car moves fast, smoothly and without noise.
- The car is equipped with a tall mirror and a convenient handrail.
- A user-friendly control panel has tactile buttons and clear numbers for visually impaired passengers.

- A pleasant female voice makes announcements about car stops.
- A mild audio signal notifies about opening and closing of the doors.
- Colorful indicators inside the car and above elevator entrances inform about the current car position.

### 1.2.2 DenvEL-4500 is safe

DenvEL-4500 ensures passengers' safety in case of fire, earthquake, power outage or other emergencies:

- The elevator conforms to the latest international safety requirements ([ISO 22559-1:2014](#)).
- Multiple proximity sensors prevent the doors from unexpected closing or opening.
- When fire or seismic sensors are activated, the car stops at the nearest floor and opens the doors so that passengers can safely evacuate.
- If there is power outage, DenvEL-4500 uses emergency power supply to take passengers to the destination floor.
- If the car is overloaded, passengers hear an audio notification, and the car does not move until the load is below the rated capacity.

### 1.2.3 DenvEL-4500 is eco-friendly

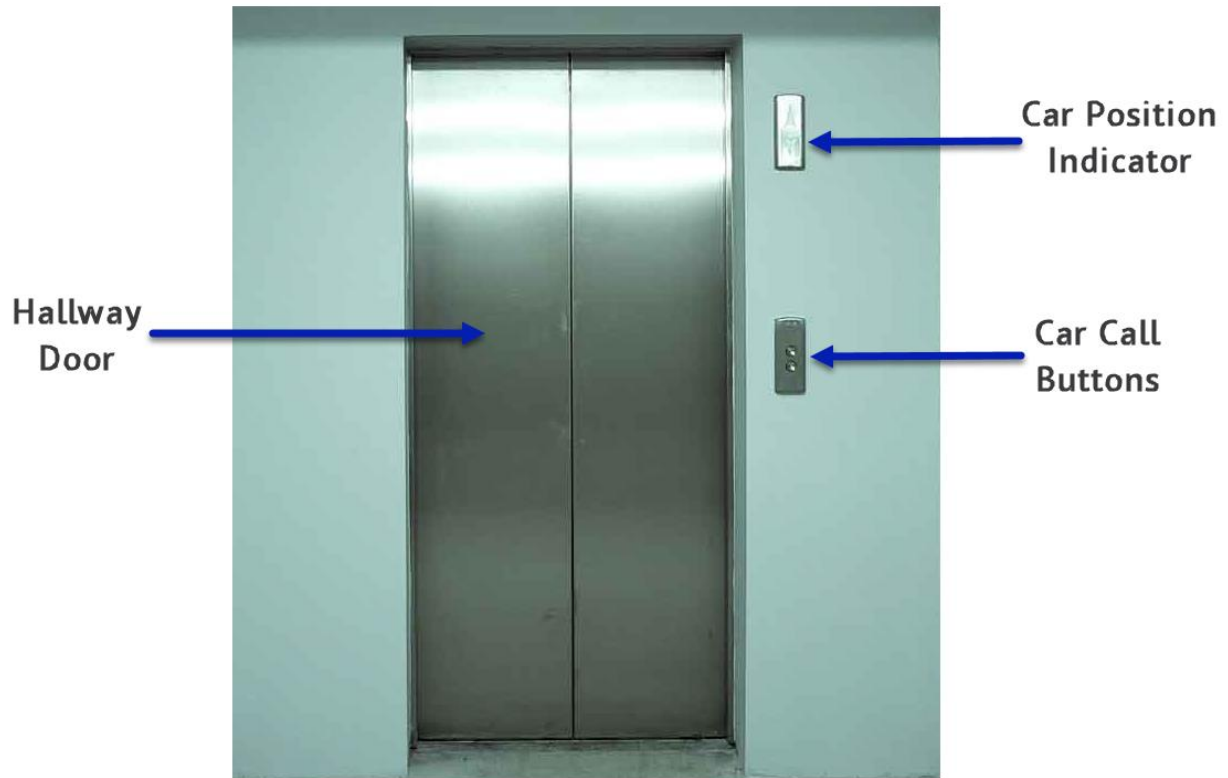
DenvEL-4500 uses cutting-edge technologies to reduce power consumption and CO<sub>2</sub> emission:

- LED indicators and downlights consume less power than conventional lamps.
- If there are several cars installed, the intelligent system selects the nearest one to minimize passengers' waiting time and reduce power consumption.
- If there are no passengers in the car, the intellectual system automatically shuts down ventilation fans and turns off lights.
- The electric engine with enhanced traction mechanism reduces CO<sub>2</sub> emission.
- When the car moves down, the electric engine goes off, and the traction mechanism is used to regenerate power.

## 1.3 Elevator entrance

You can find an entrance into the elevator on every floor. The following diagram shows how this entrance looks like.

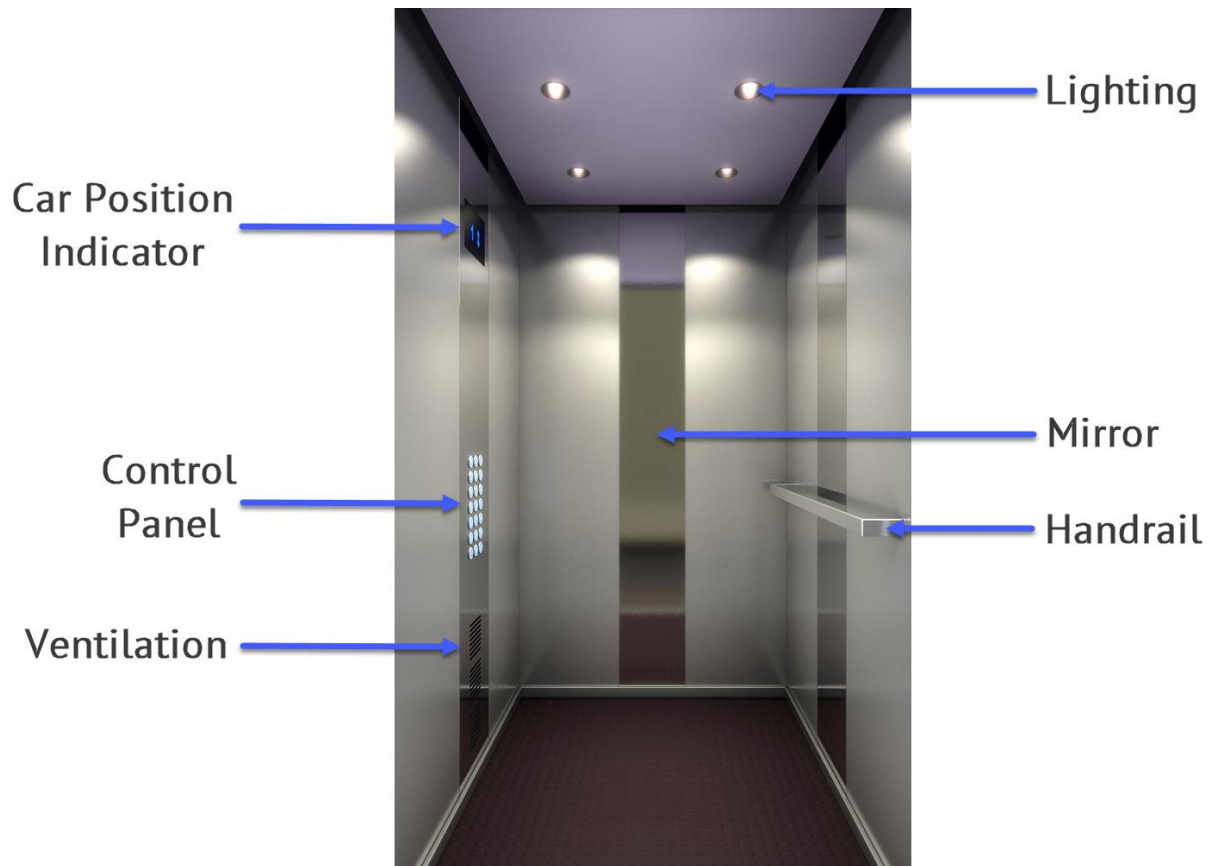




- **Hallway door** is a sliding door which opens automatically when the car arrives to the floor so that passengers can enter the car or leave it.
- **Car position indicator** is a LED screen displaying number of the floor where the car is currently on, and an arrow pointing the direction of the car movement.
- **Car call buttons** are two buttons passengers press when they want the car to move to the floor they are currently on. Depending on the destination floor, a passenger should press either the upper (↑) or lower (↓) button.

## 1.4 Inside the car

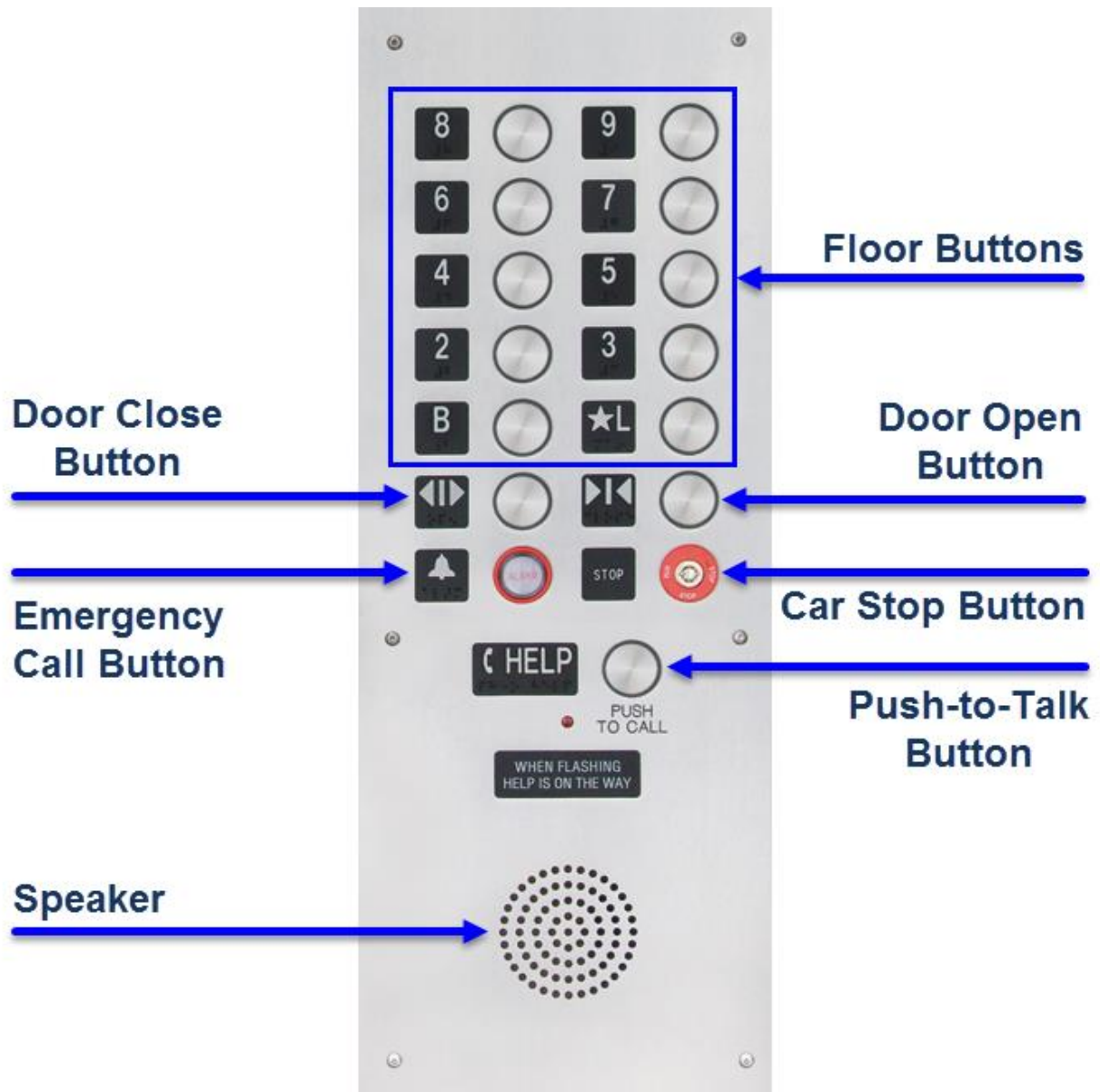
The following diagram shows the interior of the car.



- **Car position indicator** is a LED screen displaying number of the floor where the car is currently on, and an arrow pointing the direction of the car movement.
- **Control panel** is a board with buttons for control of the car movement and operation (see [Control panel](#)).
- **Ventilation** is used to maintain normal temperature and keep the air fresh.
- **Lighting** consists of four LED downlights providing bright but soft illumination.
- **Mirror** is used to take passengers' time while they travel between floors.
- **Handrail** provides support for passengers who have disabilities or experience difficulties in balance.

## 1.5 Control panel

The following diagram shows the control panel. To the left of every button there is a LED indicator. The indicator lights up after a passenger presses the corresponding button.



- **Floor buttons** are pressed to make the car go to the destination floor.
- **Door close button** and **Door open button** are pressed to force the elevator door to close and open.
- **Emergency call button** is pressed to call for help in case of an emergency situation.
- **Car stop button** is pressed to make the car stop.
- **Push-to-talk button** is a button you press when you talk to emergency personnel.
- **Speaker** is a device which delivers speech coming from emergency personnel.



## CHAPTER 2

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### How to use DenvEL-4500

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This section provides instructions on using DenvEL-4500. Before proceeding, please read the important rules.



## 2.1 Important rules

When using DenvEL-4500:

- Do not smoke in the car
- Do not try to get out of the car, if it is stuck between floors
- Do not use the elevator in case of fire, if there is smoke inside the car or a smell of burning
- Do not carry explosives, inflammables, and toxins in the car
- Do not enter the hoistway
- Do not overload the elevator
- Do not manually open hallway doors
- Do not jump in the car
- Do not spill any liquid, dust or sand into the hoistway

## 2.2 Riding DenvEL-4500

To ride DenvEL-4500:

1. Go to the elevator *entrance*.
2. Press one of the two car call buttons:
  - If you want to go to the upper floor, press ↑.
  - If you want to go to the lower floor, press ↓.
3. Wait until the car arrives to the floor you are on.  
You can monitor the car position and moving direction on the car position indicator.
4. When the car arrives, take a step aside to let any people leave it.
5. If the car has enough space, enter it. Otherwise let the door close and start over from Step 2.
6. Select a floor you want to travel to on the *control panel*.

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**Note:** If someone is standing closer to the control panel, you may politely ask this person to select a floor for you.

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7. Wait until the car arrives to the destination floor.  
You can monitor the car position on the car position indicator.
8. When the door opens, do not hesitate to leave the car.

## 2.3 Dealing with emergency situations


If the car is stuck between floors, if the door does not open, or in case of any other emergency situation:

1. Relax and do not panic. There is plenty of air in the car.

**Warning:** Do not try to get out by yourself.

2. On the *control panel*, press the emergency call button.



The  indicator will light up.

3. Wait until someone from emergency personnel answers.
4. Press and hold the push-to-talk button. State your problem clearly and then release the button.
5. Wait for the emergency personnel to fix the problem.
6. While help is on the way, keep calm and have an amiable conversation with other passengers.