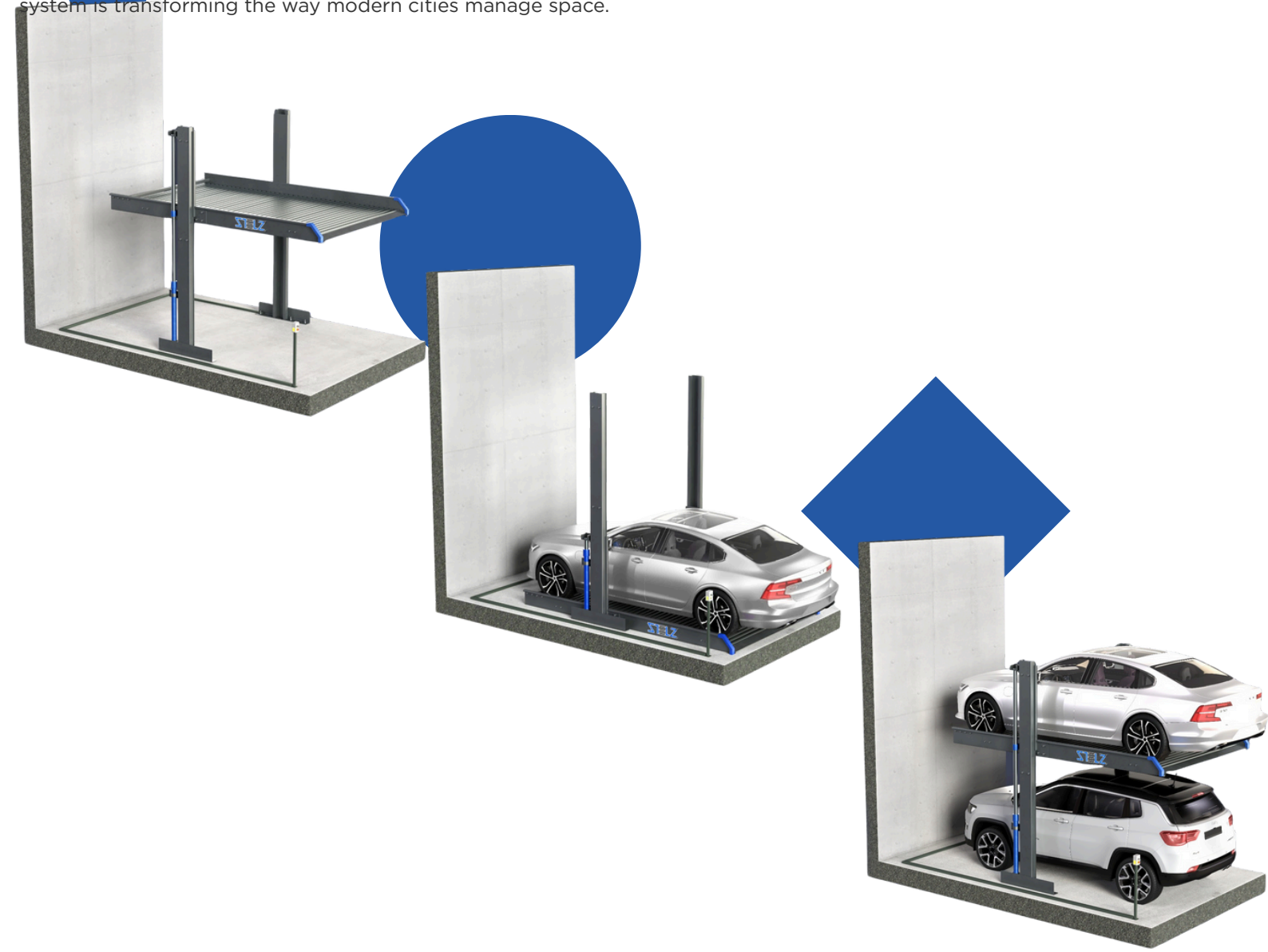
PRODUCT DATA SHEET

STELZ
Elevate to Park

TWO-LEVEL STACK PARKING STSTEMS | S-01.

A 2-level hydraulic car parking system is an innovative space-saving solution that allows two vehicles to be parked vertically in the footprint of a single slot. The upper platform is lifted using a hydraulic mechanism, creating ample space below for a second vehicle. It is ideal for residential buildings, commercial complexes, and office spaces where land is limited but demand for parking is high. The system operates smoothly with minimal manual effort and supports a wide range of vehicle sizes, including sedans and SUVs. Installation is quick and requires minimal civil work, making it a cost-effective upgrade for any property. Equipped with safety locks, anti-fall mechanisms, and robust hydraulic cylinders, it ensures safe and reliable operation. The design is durable, low-maintenance, and built to withstand everyday usage. It can be customized to suit different site conditions, height restrictions, and architectural preferences. By reducing the land required for parking, it also helps lower the urban carbon footprint. A smart, sustainable, and future-ready solution, the 2-level hydraulic car parking system is transforming the way modern cities manage space.



Key Features:

- Saves Spaces
- Maximize Parking Spaces
- Easy Maintenance
- Increased Vehicle Security
- Automation & Mechanization
- Safety Sensors
- Customizable for Different Needs

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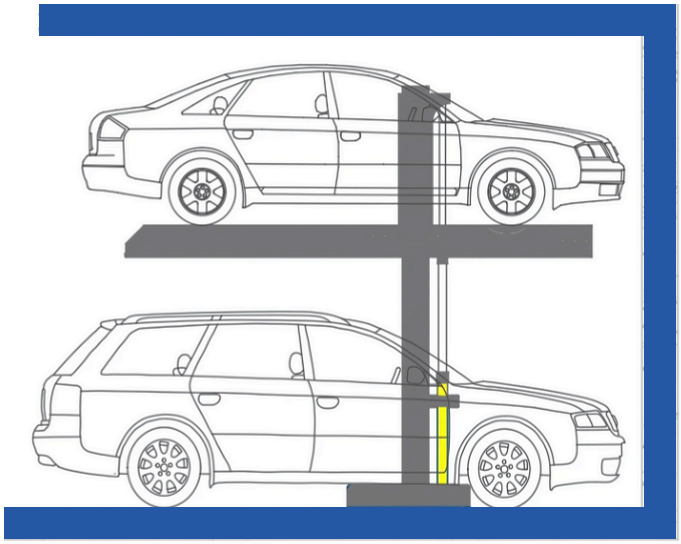
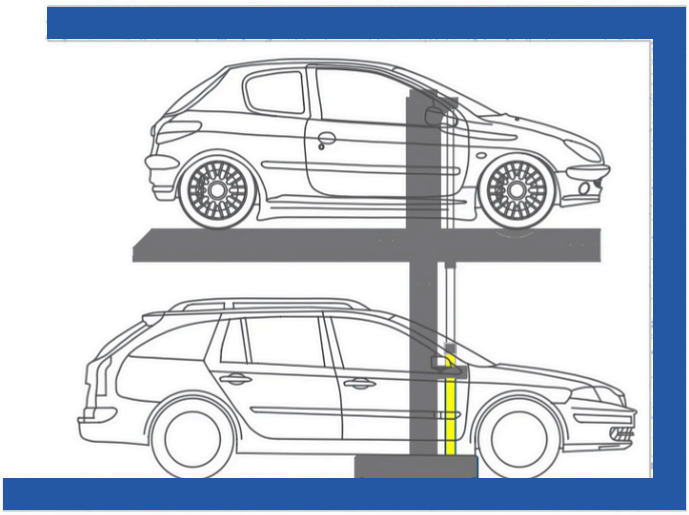
Dimensions, Technical Details, and Performance Metrics

Stack Position:





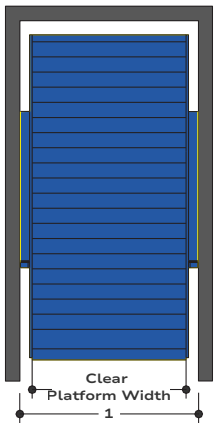
Vertical Clearance:

REGULAR TYPE HEIGHT - SINGLE UNIT	SEDAN + SEDAN	HATCHBACK + SEDAN	TALLBOY + SEDAN	MICROSUV + HATCHBACK	SUV + SEDAN	SUV + SEDAN	SUV + HATCHBACK	SUV + SUV
CAR HEIGHT LOWER LEVEL	1500mm	1600mm	1700mm	1800mm	1900mm	2000mm	2000mm	2000mm
CAR HEIGHT UPPER LEVEL	1500mm	1500mm	1500mm	1500mm	1500mm	1500mm	1600mm	2000mm
TOTAL HEIGHT:	3200mm	3300mm	3400mm	3500mm	3600mm	3700mm	3800mm	4.200mm

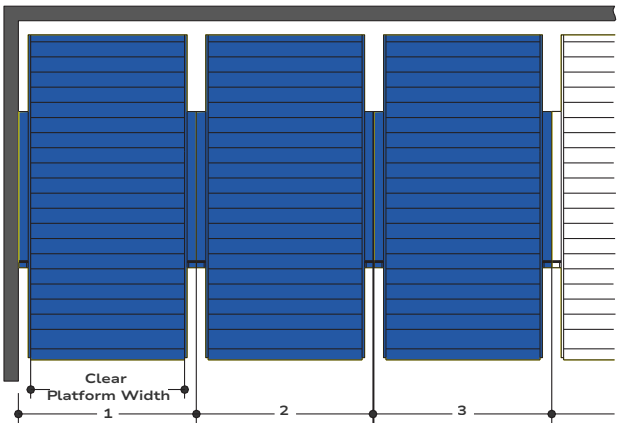
The above-mentioned height represents the clear height required for system installation, inclusive of the buffer space.

Clear Width:

Single unit



Units in a rows



CLEAR SPACE REQUIRED TO INSTALL SYSTEMS	CLEAR PLATFORM WIDTH
2450mm	**2100mm**
2550mm	**2200mm**
2650mm	**2300mm**
2750mm	**2400mm**
2850mm	**2500mm**

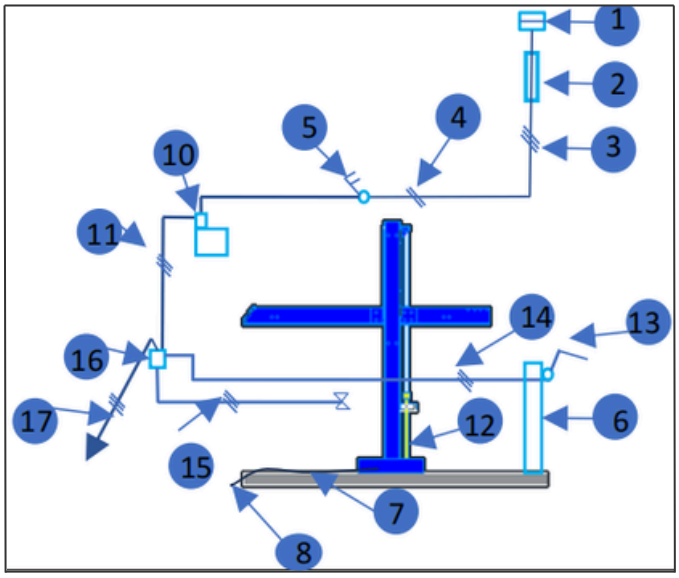
Parking Slot Length:

Two-level stack car parking systems might require a minimum length in the range of 4.5 to 5 meters for the platform itself, the actual installation length, including necessary clearances and pit requirements, will often be closer to 5.2 to 5.5 meters (or more for longer vehicles) as advised by STELZ experts.

- Typical Platform Lengths:
- Small Cars: 4000 mm
- Medium Sedans: 4500 mm
- Large Cars/SUVs: 4500 mm - 5000 mm
- Maximum Car Length on System: Up to 5000 mm.
- Civil Area Length: Often specified around 5200 mm

Electrical Details:

NO	SPECIFICTION	POSITION	QTY
1	ELECTRICAL METER	IN SUPPLY LINE	1 PER UNIT
2	MAIN FUSE	3 X FUSE 16 A (SLOW) OR CIRCUIT BREAKER 3 X 16 A (TRIGGER CHARACTERISTIC K, G, OR C)	1 PER UNIT
3	SUPPLY LINE	5 X 2.5 MM^2 (3 PH + N + PE) WITH MARKED WIRE AND PROTECTIVE CONDUCTOR (TO MAIN SWITCH)	1 PER UNIT
4	SUPPLY LINE	5 X 2.5 MM^2 (3 PH + N + PE) WITH MARKED WIRE AND PROTECTIVE CONDUCTOR (FROM MAIN SWITCH TO UNIT)	1 PER UNIT
5	LOCKABLE MAIN SWITCH	DEFINED IN THE PLAN CHECK	1 PER UNIT
6	OPERATING STAND	REQUIRED PER SYSTEM	1 PER SYSTEM
7	POTENTIAL EQUALIZATION	FROM FOUNDATION GROUNDING CONNECTION, COMPLIANT WITH DIN EN 60204	1 PER SYSTEM
8	FOUNDATION EARTH CONNECTOR	CORNER PIT FLOOR	EVERY 10M
9	EMPTY PIPE EN25 (M25)	REQUIRED	1 PER UNIT
10	HYDRAULIC UNIT	1.5/3.0 KW, THREE-PHASE CURRENT, 230/400 V, 50 HZ	-
11	CONTROL CABLE	4 X 2.5 MM^2 WITH MARKED WIRES AND PROTECTIVE EARTH	-
12	CHAIN MONITORING	-	-
13	OPERATING ELEMENT	-	-
14	CONTROL CABLE	7 X 1.5 MM^2 WITH MARKED WIRES AND PROTECTIVE EARTH	-
15	CONTROL CABLE	3 X 0.75 MM^2 (PH + N + PE)	-
16	JUNCTION BOX UNIT	-	-
17	CONTROL CABLE	4 X 2.5 MM^2 WITH MARKED WIRES AND PROTECTIVE EARTH (TO NEXT SYSTEM)	-



Electrical Supply Requirements For 2 Level Stacker – Client's Scope

- **Incoming Power Supply:**

3-Phase, 415 VAC (±10%), 50 Hz (±2%), with Neutral and Earth (3Ph + N + E) – per unit.

- **Control Switchgear:**

4-Pole RCBO (or ELCB + MCB), 16 Amp, with 100mA sensitivity/leakage current – per unit. To be installed as per the drawing at a height of 1500 mm.

- **Incoming Cable Specification:**

5-core x 2.5 sq.mm flexible multi-core copper cable (3Ph + N + E), from the control panel to each power pack location.

- **Canopy for Outdoor Units:**

If required, the provision of a canopy for outdoor installations is under the customer's scope.

GRADE OF CONCRETE MIN. C20/25=M25

The units will be secured to the anchor points using heavy-duty anchor bolts, penetrating to a depth of approximately 80-100 mm.

- Base Plate Thickness: Minimum 180-200 mm
- Concrete Quality: Must meet the building's static requirements, but a minimum of C20/25 is required for dowel fastening.
- Special Foundations: Necessary for installations on asphalt floors or paving stones.

Maintenance.

Stelz and its international partners have an established assembly and customer service network. Annual maintenance is carried out upon signing a maintenance contract.

Protection Against Corrosion.

Regular maintenance must be performed in accordance with STELZ Maintenance Instructions, regardless of other maintenance work.

- Galvanized parts and platforms should be cleaned regularly to remove dirt, road salt, and other contaminants that may cause corrosion.
- The pit must always be well-ventilated and adequately aerated.

Drive Way/Car Retrieval:

1. Minimum Driveway Width

At least 5 meters clear space in front of the 2-level system is recommended for smooth car retrieval and parking. For luxury vehicles or tighter basements, go up to 5.5-6 meters if space permits.

2. Turning Radius Required

Standard turning radius varies from 5.0 to 5.5 meters depending on car type. Ensure a minimum 6.0-meter open circular area in front for maneuverability.

3. Vehicle Approach & Alignment

Straight entry is ideal; avoid 90-degree turns or reverse entry unless additional space is available.

Provide a buffer space of 1.0–1.5 meters for vehicles to align with the platform.

For comfortable maneuvering, aim for at least 6m clearance in front of the parked vehicle, especially in tight spaces like residential driveways or parking lots. If there are obstacles or walls, extra space may be needed.

Manufacturer:

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*** For any other quires Contact with the Stelz Team.**