

**HARDING**  
AUTOPARK SYSTEMS



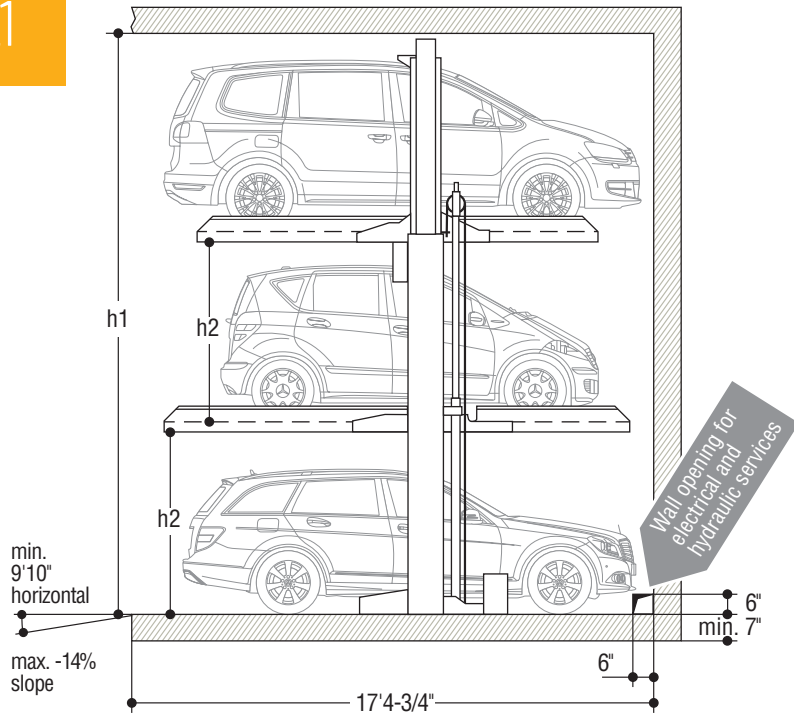
**SPEC SHEET**

**WÖHR**  
**PARKLIFT™**  
**421**

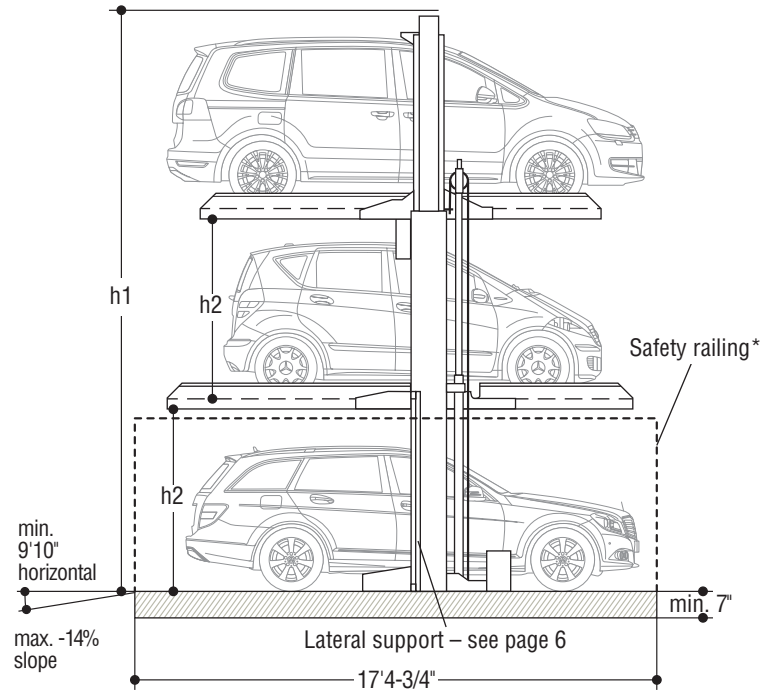
Dependent Parking for  
Three-Car Staking

**PARKLIFT  
421**

**Installation Indoor**



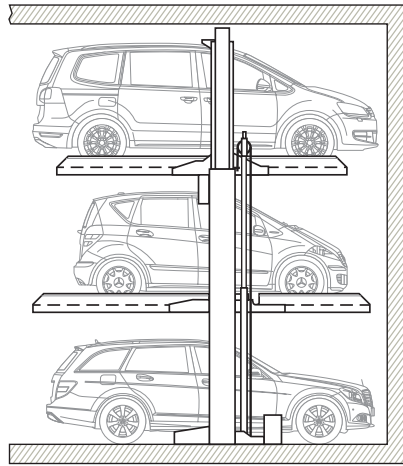
**Installation Outdoor**



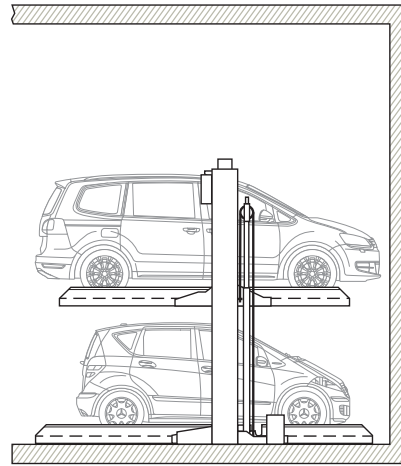
\* Rear and lateral site safety railing, compliant to the DIN EN ISO 1 3857 standard requirements, is to be supplied by the customer. The height of the safety railing is dependent on the distance from the moving parts.

	PARKLIFT 421-500	PARKLIFT 421-530	PARKLIFT 421-560	PARKLIFT 421-590	PARKLIFT 421-620
Height $h_1$	16'5"	17'4-3/4"	18'4-1/2"	19'4-1/2"	20'4"
Height $h_2$	5'1"	5'5"	5'9"	6'1"	6'4-3/4"
Car Height	4'11"	5'3"	5'7"	5'11"	6'2-3/4"

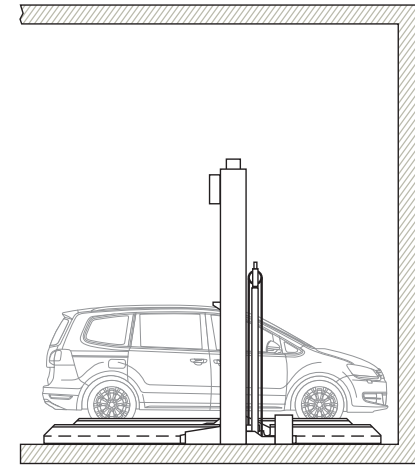
## Function



Before lowering the platforms, the car on the entrance level must be driven off!



Before lowering the upper platform, the car on the middle level must also be driven off!



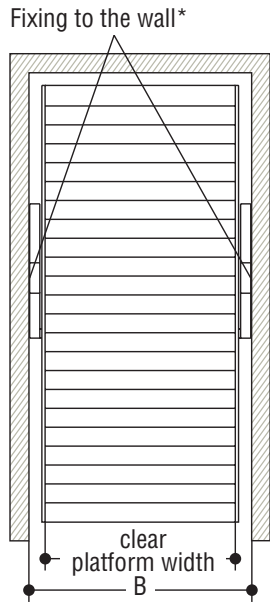
## Notes

1. Clear platform width of 8'2-1/2" / 8'6-1/4" for car widths of 6'2-3/4".  
For large touring sedans we recommend a clear platform width of at least 8'6-1/4" / 8'10-1/4".
2. According to ISO 3864 the floor has to be marked with 4" wide yellow-black stripes at a distance of 1' 1-3/4" from the platform edge by the purchaser (see "statics and construction requirements" on page 4).
3. It is not possible to have channels or undercuts and/or concrete haunches along the floor-to-wall joints. In the event that channels or undercuts are necessary, the system width needs to be reduced or the installation width needs to be wider.
4. The manufacturer reserves the right to construction or model modifications and/or alterations. Furthermore, the right to any subsequent part modification and/or variations and amendments in procedures and standards due to technical and engineering progresses in the art or due to environmental regulation changes, are also hereby reserved.

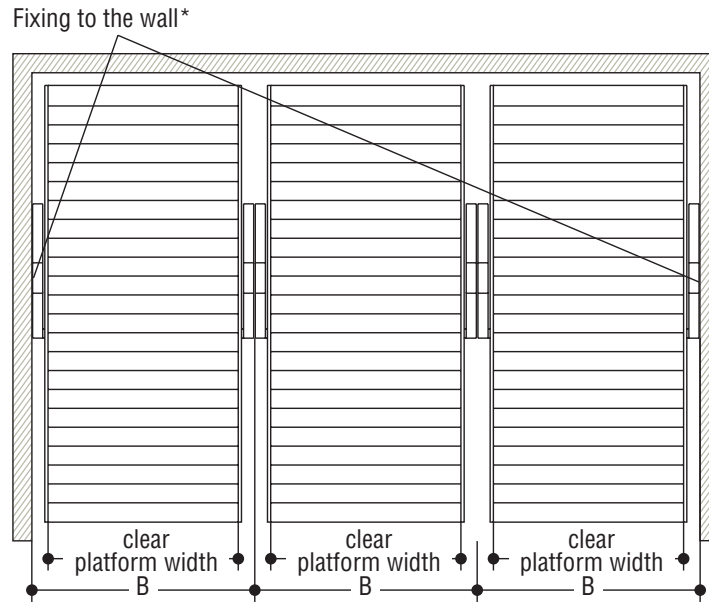
## Width Dimensions · Installation Indoor

All dimensions shown are minimum. Construction tolerances must be taken into consideration. All dimensions in feet and inches.

### Single Unit



### Row Arrangement



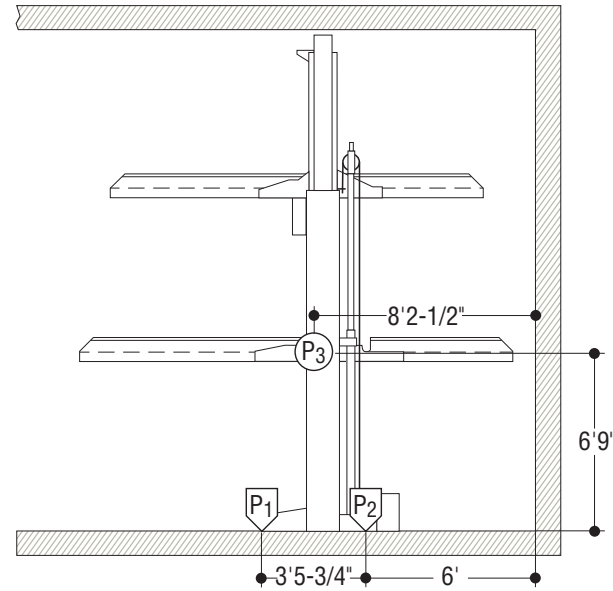
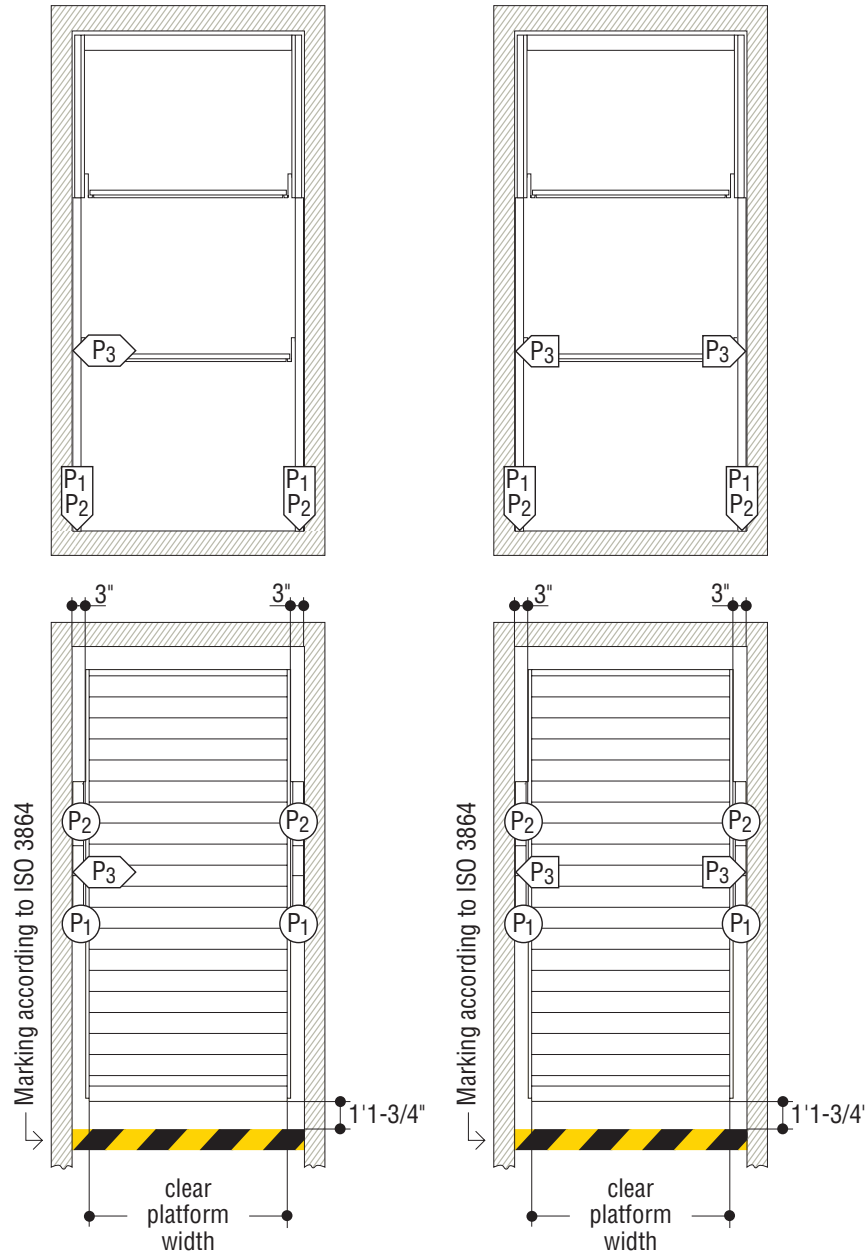
Wall openings required between partitions for electrical and hydraulic conduits must be provided where applicable. Wall openings may not be closed after installation.

The drive aisle width to be compliant with country regulations locally in force.

	SPACE REQUIRED B	GIVES CLEAR PLATFORM WIDTH	
		UPPER LEVEL	MIDDLE LEVEL
230/220	8'6-1/2"	7'2-1/2"	7'6-1/2"
240/230	8'10-1/2"	7'6-1/2"	7'10-1/2"
250/240	9'2-1/4"	7'10-1/2"	8'2-1/4"
260/250	9'6-1/4"	8'2-1/4"	8'6-1/4"
270/260	9'10-1/4"	8'6-1/4"	8'10-1/4"

\* Fixing to the wall on one side (either left or right), is sufficient. The wall shall then be subject to both compressive and traction forces (see statics and construction requirements).  
With a two-sided fixing system, the wall shall only be subject to compressive forces.

Statics and Construction Requirements - Installation Indoor



The system units are locked onto the construction frame points of support using heavyduty dowels (having a drilling depth of 4" to 4-3/4").

Base plate thickness minimum 7"! Concrete quality according to the static requirements of the building, but for the dowel fastening we require a concrete quality of min. C20/25.

Special foundations are required with asphalt floors or paving-stones.

**ONE-SIDED SUPPORT**

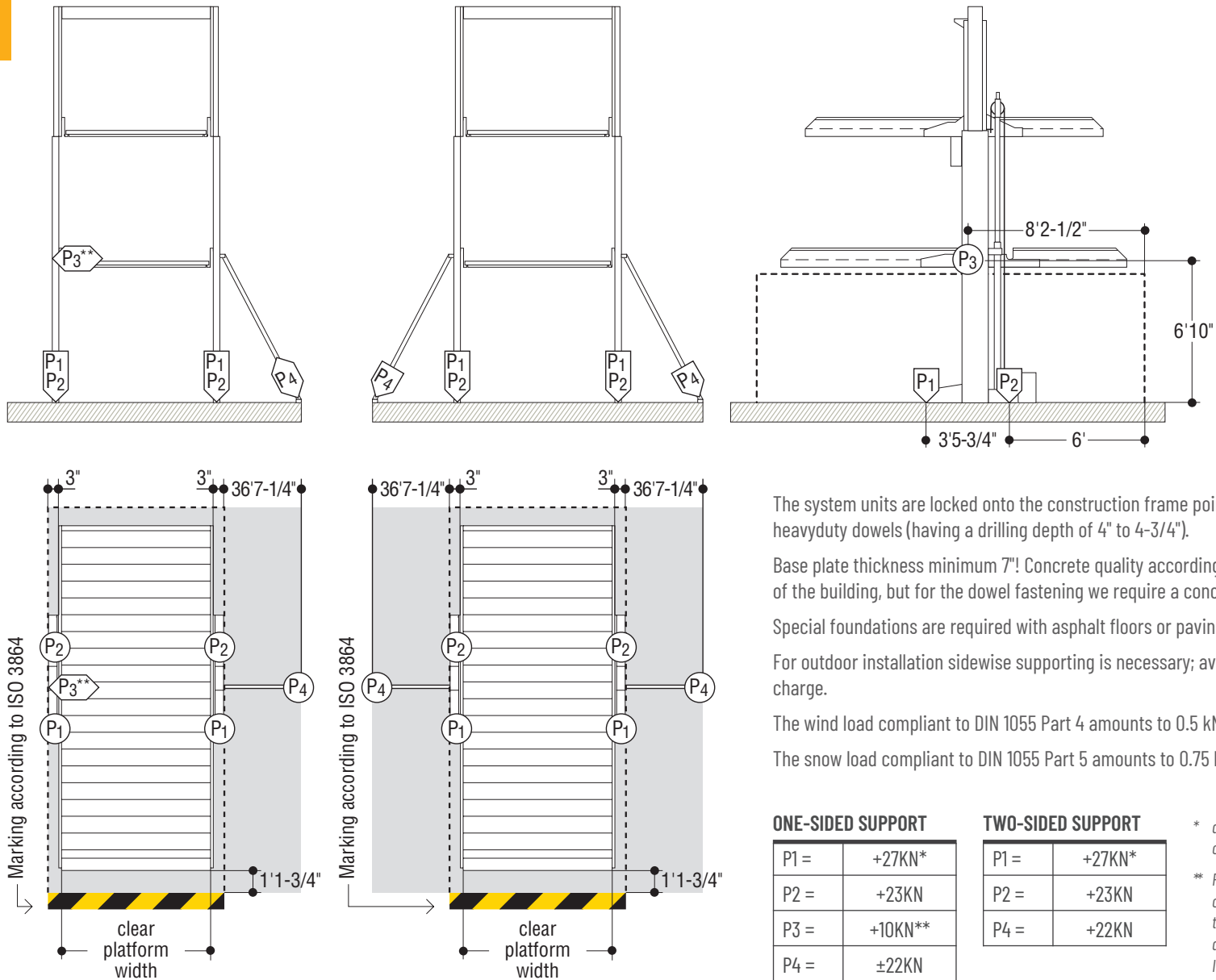
	421-2.0	421-2.6
P1 =	+20KN*	+25KN
P2 =	+18KN	+21KN
P3 =	±3KN	±3KN

**TWO-SIDED SUPPORT**

	421-2.0	421-2.6
P1 =	+20KN*	+25KN
P2 =	+18KN	+21KN
P3 =	+3KN	+3KN

\*All static loadings include the weight of the car.

Statics and Construction Requirements - Installation Outdoor



The system units are locked onto the construction frame points of support using heavyduty dowels (having a drilling depth of 4" to 4-3/4").

Base plate thickness minimum 7"! Concrete quality according to the static requirements of the building, but for the dowel fastening we require a concrete quality of min. C20/25.

Special foundations are required with asphalt floors or paving-stones.

For outdoor installation sideways supporting is necessary; available against additional charge.

The wind load compliant to DIN 1055 Part 4 amounts to 0.5 kN/m<sup>2</sup>.

The snow load compliant to DIN 1055 Part 5 amounts to 0.75 kN/m<sup>2</sup>.

**ONE-SIDED SUPPORT**

P1 =	+27KN*
P2 =	+23KN
P3 =	+10KN**
P4 =	±22KN

**TWO-SIDED SUPPORT**

P1 =	+27KN*
P2 =	+23KN
P4 =	+22KN

\* all static loadings include the weight of the car

\*\* P3 (compressive and traction forces) only occur when the system is anchored to a building on one side. If the system is anchored to a building, lateral support (P4) can be omitted.

