HARDING AUTOPARK SYSTEMS

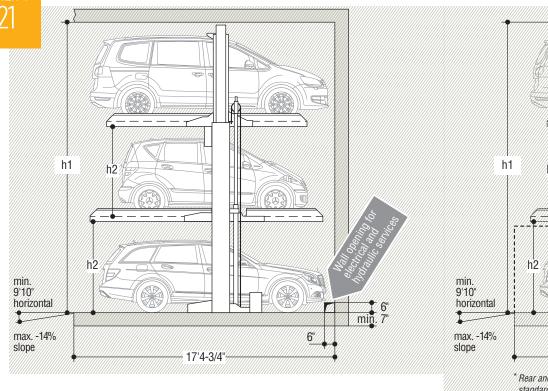
SPEC SHEET

WÖHR PARKLIFT™ 421

Dependent Parking for Three-Car Staking

Installation Indoor

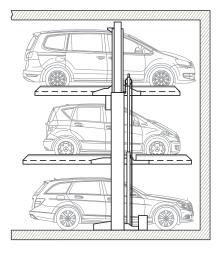
Installation Outdoor



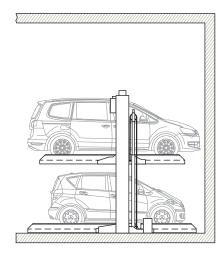
1	
h: h: /////////////////////////////////	NZ N
	Safety railing*
min. 9'10"	h2
horizontal	min_7'
max14% slope	Lateral support – see page 6
	* Rear and lateral site safety railing, compliant to the DIN EN ISO 1 3857 standard requirements, is to be supplied by the customer. The height of the safety railing 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 h1	16'5"	17'4-3/4"	18'4-1/2"	19'4-1/2"	20'4"
Height h2	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"

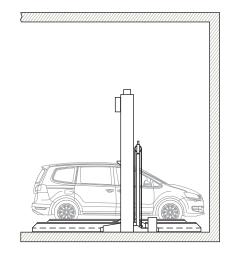
Function



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

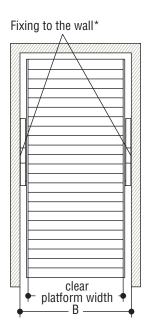
- 1. Clear platform width of 8'2-1/2" / 8'6-1/4" for car widths of 6'2-3/4". For large touring sedans we recommend a clear platform width of at least 8'6-1/4" / 8'10-1/4".
- 2. According to ISO 3864 the floor has to be marked with 4" wide yellow-black stripes at a distance of 1'1-3/4" from the platform 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.



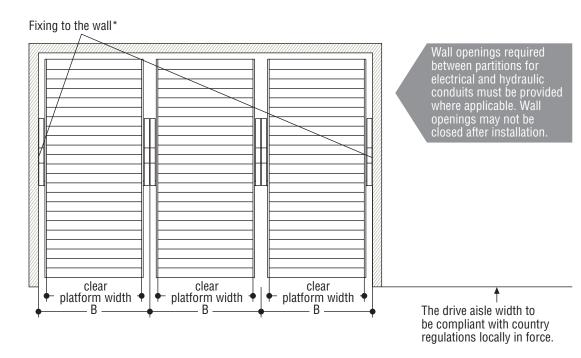
Width Dimensions · Installation Indoor

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

Single Unit



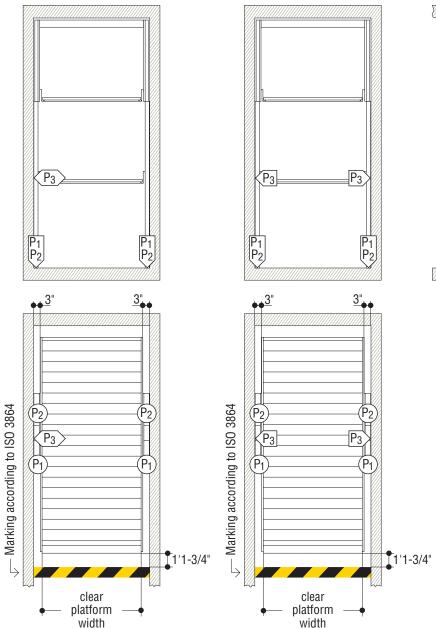
Row Arrangement

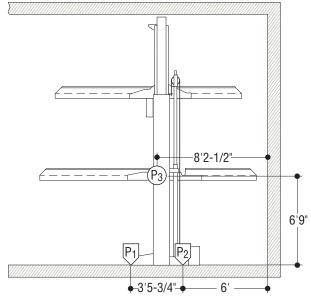


	SPACE	GIVES CLEAR PL	LATFORM WIDTH	
	REQUIRED B	UPPER LEVEL	MIDDLE LEVEL	
230/220	8'6-1/2"	7'2-1/2"	7'6-1/2"	
240/230	8'10-1/2"	7'6-1/2"	7'10-1/2"	
250/240	9'2-1/4"	7'10-1/2"	8'2-1/4"	
260/250	9'6-1/4"	8'2-1/4"	8'6-1/4"	
270/260	9'10-1/4"	8'6-1/4"	8'10-1/4"	

* 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

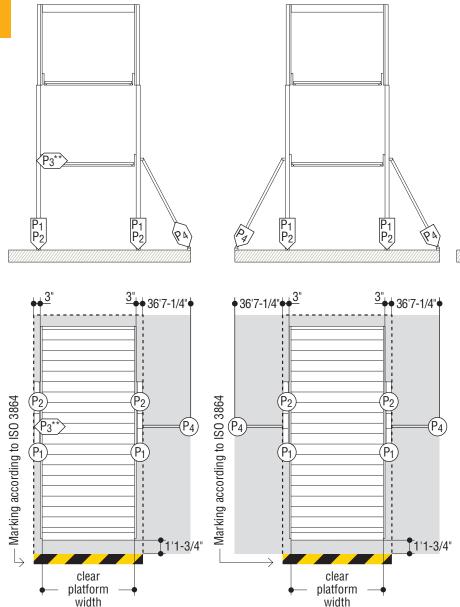
	421-2.0	421-2.6
P1 =	+20KN*	+25KN
P2 =	+18KN	+21KN
P3 =	±3KN	±3KN

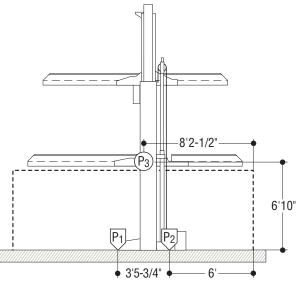
TWO-SIDED SUPPORT

	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 sidewise supporting is necessary; available against additional charge.

The wind load compliant to DIN 1055 Part 4 amounts to 0.5 kN/m2.

The snow load compliant to DIN 1055 Part 5 amounts to 0.75 kN/m2.

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.

TEMPERATURE

The installation is designed to operate between 40° and 105° F. Atmospheric Humidity: 50% at 105 F. If the local circumstances differ from the above please contact Harding Autopark Systems.

HYDRAULIC POWER PACKS AND ELECTRICAL SPECIFICATION

For the accommodation of the hydraulic power packs an additional space is required which will be determinded during the verifications of the drawings, e.g. in a wall recess.

Connection 208-230V, 50/60Hz, 3 Phase. Power consumption max. 3.5 kW. Fuse or circuit breaker 3×30 A slow blow and supply line 3 Ph+N+PE (according to local regulations) up to main switch, and connection of the supply line is performed by customer.

DIMENSIONS

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

CONFORMITY TEST

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

NOTES

In case of lower cars with spoilers, contact Harding Autopark Systems (see "clearance profile").

MAINTENANCE

Annual maintenance is performed at conclusion of a maintenance contract.

PROTECTION AGAINST CORROSION

Periodic cleaning of system according to Maintenance Instructions must be carried out in addition to regularly scheduled maintenance by Harding Autopark Systems.

Clean up galvanized parts and platforms of dirt and road salt as well as other pollution (corrosion danger)!

Pit must be well ventilated.

FIRE SAFETY

Each and every fire safety requirement and all possible mandatory item(s) and equipment(s) (fire extinguishing systems and fire alarm systems, etc.) are to be provided by the customer.

CLEARANCE PROFILE (STANDARD CAR)

