COMBIPARKER 556 | 10.2017 | C027-5243 | © WÖHR Autoparksysteme GmbH

Data Sheet WÖHR COMBIPARKER 556



Suitable for condominium and office buildings. For permanent use only!

In case of short time user (e.g. for offices, hotels, a.s.o.) technical adjustments are required. Please contact WÖHR!

Combiparker 556-2,0: Load per platform max. 2000 kg (load per wheel max. 500 kg).

Combiparker 556-2,6: Load per platform max. 2600 kg (load per wheel max. 650 kg).

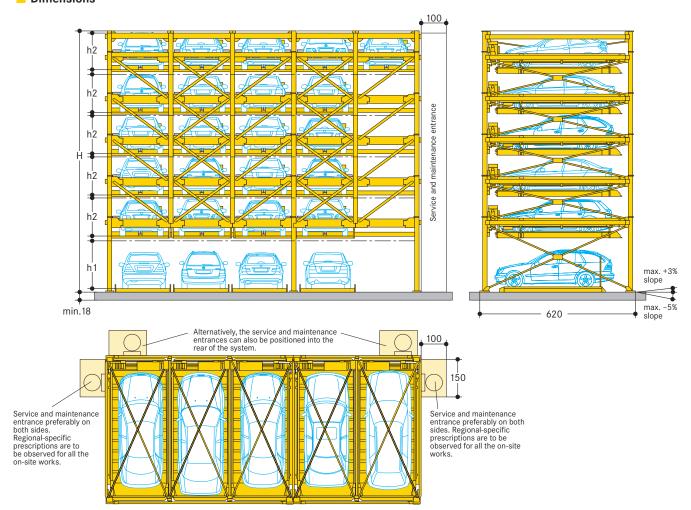
Platforms are in horizontal position to drive on.



Notes

- 1. Measurements have to be clarified with WÖHR before starting the construction.
- 2. Scope of supply in accordance to DIN EN 14010 with doors.
- 3. Installation length of 620 cm for car length of a max. of 500 cm. Clear platform width of 250 cm for car widths of 190 cm. For large touring sedans we recommend a clear platform width of at least 260–270 cm.
- 4. 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.
- 5. 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.

Dimensions



Standard type 556 (200/160)

Car height h1	Car height h2
200	160
Levels	Height H*
3	580
4	757
5	935
6	1103
	935

Compact type 556 (200/150)

Car neight n i	Car neight nz
200	150
Levels	Height H*
3	560
4	727
5	895
6	1053

Please attend to restricted car height on the upper levels!

Comfort type 556 (200/180)

Car height h1	Car height h2 180
Levels	Height H*
3	620
4	817
5	1015
6	1203

Compact type 556 (150/150)

Car neight in	Car neight fiz
150	150
Levels	Height H*
3	510
4	677
5	845
6	1003

Please attend to restricted car- and platform distance height!

Comfort type 556 (200/200)

Car height h1	Car height h2
200	200**
Levels	Height H*
3	660
4	877
5	1095

** Vehicle height 220 cm on request.

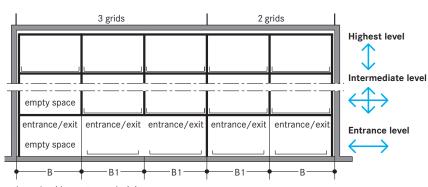
Number of parking places

	2	3	4	5
Levels	grids	grids	grids	grids
3	4	7	10	13
4	5	9	13	17
5	6	11	16	21
6	7	13	19	25

Up to 3 rows can be set behind each other. Please consult WÖHR for detailed information.

The height H is being reduced by 10 cm for systems within the building, provided that the system can be fixed to the building.

Width dimensions



n	each	grid	an	entrance/	'exit	is	necessary	
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Space B	required B1	d gives clear platform width on upper levels	gives clear platform width entrance level
270	250	230	207*
280	260	240	217*
290	270	250	227*
300	280	260	227*
310	290	270	227*

At the parking platforms of the upper levels positioning aids are fixed in the area of the front wheels. Thus the platform width is reduced by approx. 12 cm at each side (left/right).

* the space to get in and out of the car for platforms in entrance level is increased by 35 cm driver side.

Evenness tolerances

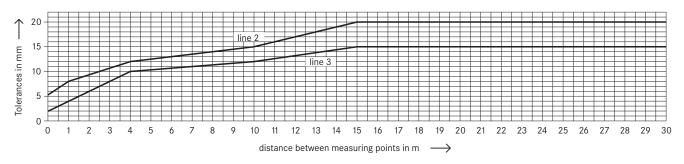
According to EN 14010 the danger of trapping between nonparallel platforms edges and the groundhastobeprevented. The distance between the lower flangeof the platforms and the garage ground must therefore not exceed 2cm.

To adhere to the safety regulations and to get the necessary even ground, the tolerances of evenness to DIN 18202, table 3, line 3, must not be exceeded. Therefore exact levelling of the ground by the client is essential.

Abstract from DIN 18202, table 3

column	1	2	3	4	5	6	
		Vertical measurements as limits in mr with measuring points distances in m t					
line	reference	0,1	1	4	10	15	
2	Unfinished to surface of covers, subconcrete and subsoils for higher demands, e.g. as foundation for cast plaster floor, industrial soils, paving tiles and slabstone paving, compund floor paving. Finished surfaces for minor purposes, e.g. warehouses, cellars	5	8	12	15	20	
3	Finished grounds, e.g. floor pavement serving as foundation for coverings. Coverings, tile coverings, PVC flooring and glued coverings.	2	4	10	12	15	

^{*} Intermediate values are to be taken out the diagram and must be rounded-off to mm.



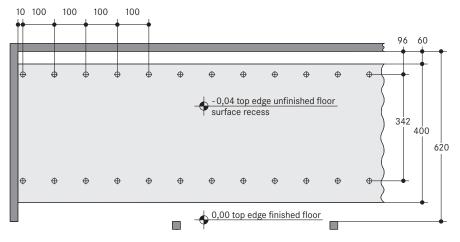
Check points

The evenness of a surface is checked independently of its position and slope by bore hole gauges between two check points on the surface. WÖHR normally make a random test using single measurements in case of obviously inaccurate surfaces.

For uniform examination of the evenness of the ground surface the following points are defined as measuring and check points:

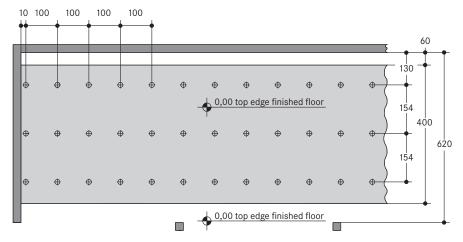
- a) for surface recess.
- b) for finished floor.

a) Layout for surface recess width 4m



 Measuring points at 100 cm points for checking the unevenness acc. to DIN 18202, table 3, line 2, or acc. diagram

b) Layout for finished floor after placing floor pavement



 Measuring points at 100 cm points for checking the unevenness acc. to DIN 18202, table 3, line 3, or acc. diagram

Track Installation · Flooring works · Drainage

The moving rail load of each platform wheel is max. 10 kN.

The evenness of the floor + screed must be achieved according to DIN 18202, table 3, line 2. After checking the floor + screed the levelling rails are mounted on top of the highest point.

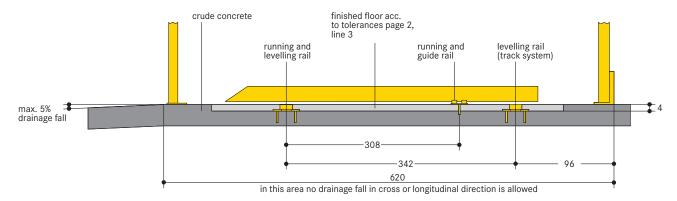
The underlining and fixing of the levelling rails occurs at the intended fixing points. For the laying of the running and levelling rails a meter tear has to be attached permanently for every railway track by the client.

The screed has to be peeled off by the client on height of the levelling rails. Do not use mastic asphalt.

The running and guide rails are fastened after placement of the screed with bolts. Evenness according to DIN 18202, table 3, line 3.

In the area of the railway track no expansion gap or building joints are allowed.

Due to the technical requirements there is no drainage fall allowed in the area of the system.



Electrical data/switch cabinet

- Main electrical supply 230/400V, 50Hz, 3 phase. Fuse or automatic circuitbreaker 3 x 25 A slow blow (acc. to DIN VDE 0100 p. 430).
- In compliance with the DIN EN 60204 standard provisions, all systems must be connected directly on site with an earthed equipotential bonding. The lead-out connection must be at a 10 m distance!
- For a remote diagnosis (optional) an internet connection at the switch cabinet is required.
- Inside the maintenance shaft the space for the switch cabinet of 150 x 130 x 220 cm must be provided.

Grounding and potential equalisation

Customer has to provide a connecting outlet for grounding next to the control cabinet, because the Potential Equalisation Rail (PER) in the control cabinet has to be connected by a preferably short cable with the grounding outlet. In the area of the steel structure the customer has to

provide at least every 10 to 20 meters (or in distances as required by the local lightning protection regulation) grounding outlets, because the total steel structure has to be connected with the grounding outlets by preferably short cables.

Operating device

- Operation device with integrated RFID-reader, 10digit keypad and text display for user guidance.
- 2. Positioning on one of the steel constructions or a bordering wall.

Operation

- After all doors are closed completely the system will run automatically.
- The parking place will be activated with a transponder or via remote control (option).

Outdoor Installation

For outdoor installation, façade coverings at all sides as well as a roof are necessary.

Façade elements with a max. load of 30 kg/m² can be mounted on the freestanding steel construction of the Combiparker – to be done by the customer.

The roof with a max, load of 50 kg/m^2 can be mounted on the same steel construction as well.

For coordination of the façade and roof fixing, please consult WÖHR.

Temperature

The installation is designed to operate between +5°and +40°C. Atmospheric Humidity: 50% at +40°C. If the local circumstances differ from the above please contact WÖHR (switch cabinet and operation device has to be heated/cooled, when necessary.

Conformity test

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

Lighting (to be performed by the customer)

In the transfer area at least 500 lux, see EN 1837:1999. In the system area at least 50 lux, see EN 81-1:1998.

Noise protection

Basis: »Sound insulation in buildings«, for technical facilities in buildings must be provided with adequate protection against air-borne and solid-borne sound. If the sound pressure level should not exceed 30 dB (A) in living– and sleeping-rooms at night, the following building requirements must be available:

<u>Insulation against air-borne sound</u> The building unit must have a sound reduction index of at least R'w 57 dB (A).

Insulation against solid-borne sound WÖHR offers additional measures for a reduction of solid-borne sound (please ask for optional quotation from WÖHR). We recommend consultation between a sound expert and WÖHR to discuss further possible steps for reduction of the solid-borne sound.

Fire protection (to be performed by the customer)

Preventive fire protection measures should be discussed between the architect and the building authority and/or the preventive fire protection authority.

Maintenance entrance

To the purpose of system maintenance it is necessary to provide on-site for a system maintenance entrance, via which it can be possible to access all the parking levels by means of stairs and/or ladders.

Maintenance

WÖHR and its foreign partners have an assembly and customer network. Annual maintenance is performed at conclusion of a maintenance contract.

Protection against corrosion

Independent of a maintenance workings has to be carried out acc. to WÖHR Cleaning and Maintenance Instruction regularly.

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

Pit must always be ventilated and dearated well.

Statics and construction

The steel structure serves as a frame-work for the lift system and the pallets. The steel structure is fastened to the floor with metal splaydowels and shored-up

sidewise against the external walls. This requires a concrete quality of C25/30. Information with regard to the statics in question can be obtained from WÖHR.

Dimensions

All dimensions shown are minimum. Construction tolerances must be taken into consideration. All dimensions in ${\sf cm}$.

Railings

If walkways are arranged directly to the side or behind the systems, railings have to be provided by the customer acc. to local requirements, height min. 200 cm – this is applicable during the construction phase too.