



# Installation and Maintenance Instruction

## for PLAYPARC-Play- and Fitness-Equipment



**We appreciate your decision for a high-quality PLAYPARC-Product.**

Thank you very much for your decision to buy a product from PLAYPARC. All PLAYPARC-Items are built conforming the relevant safety norms and are constructed and produced with care. Usage of high quality materials in combination with a solid construction leads to more safety.

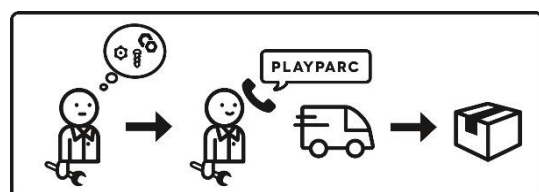
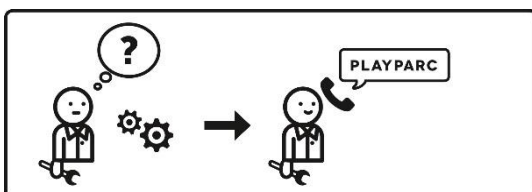
In your hand you are holding important **Installation** and **maintenance instruction** for PLAYPARC-Products.  
Please follow these hints and rules.

In this document you will find:

- General Installation Instruction
- Special Installation Instruction
- Safety surface regulations
- Special notes for signage and positioning of 4FCIRCLE® devices
- Mounting notes for prefabricated foundations
- Inspection and maintenance notes for PLAYPARC devices
- Maintenance minutes for a detailed list of the work performed

**There are separate installation instructions for the individual devices that you can find enclosed.**

If you have any questions or if you need any help, contact your sales partner or our employees:



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Name:	ST(dtV)	MG(dtV)	ST(dtV)	MG (dtV)	ST	ST	MB	MB	MB
Date:	04.09.16	12.10.16	16.10.16	20.10.16	25.10.16	23.11.16	04.04.19	17.10.19	14.07.21

# General installation notes

**Read the entire installation instructions attentively before starting installation!**



To ensure complete curing of the foundations, it must be ensured on site that the devices are not used **for at least 5 days after concreting** (construction site fence).



To check the stability of the one-legged constructions (or a series of them) installed in synthetic fall protection, we recommend an **inspection opening** at the base of the stand.



**Only tighten the screws when the entire unit has been assembled.** All continuous screw connections must be applied with self-locking nuts or screws. When self-securing is not possible, securing by the corresponding means is required (medium-strength threadlocker, e.g. Loctite). **All screw connections must be reviewed for tight fit before release of the device**, at the latest 14 days after installation **and tightened if necessary**.



Please observe the following for **wood construction parts**: Wood is a natural product. **Crack formation** must be expected along the course of the fibres for this reason. These cracks may go up to one third through the wood diameter and across the entire length of the part. This does not risk reducing structural load-bearing capacity.



**GRV** – The "Gewinde-Rohr-Verbindung" (thread-tube connection) is a connection system that is used in all load-bearing elements. It ensures a safe, form-locking connection. Re-tightening is also ensured in wood components. For attachment elements such as ropes, nets, joints, etc., the threaded tube is turned firmly onto the respective bolt with threadlocker, then fed through the corresponding bore in the device and countered with the enclosed recessed-head screw (M10 x 45 mm with securing) incl. washer.

Required tools: 2 socket wrenches M10.



The delivery includes detailed **mounting and maintenance instructions**. Inspection and maintenance work must be performed and logged by qualified persons in the indicated periods.



For shipment by carrier, the goods must be inspected for completeness and impeccable condition at delivery. Defects must be reported at once and noted on the consignment note.



All wood, steel and plastic elements must be disposed of according to the local provisions.



Check the device sizes before setup – construction changes are reserved. We assume no liability if the setup is not done professionally. The device must be blocked off while installed incompletely or disassembled during repair or maintenance work due to special dangers to children.



Genuine spare parts are available from PLAYPARC GmbH under indication of the item number.



The **required fall protection depends on the free fall height**. The **installation instructions** state the free fall height of the devices. The fall protection provisions are subject to some national and regional differences. Therefore, inquire about the standards applicable at your site and apply the directives stated there. 4FCIRCLE® fitness devices are subject to the fall protection provisions of standard DIN-EN16630:2015, NEOSPIEL® devices to those of the respective current DIN/EN 1176.


## Soil types and drop heights according to EN 1176-1: 2017

The minimum dimension of the drop space is calculated on the basis of the highest drop height of a device. For a drop height (Y) ≤ 1500 mm, a minimum dimension of 1500 mm must always be observed. If the drop height is greater, the minimum dimension (X) is calculated using the formula  $X = \frac{2}{3} Y + 0,5$  [in metres] is calculated.

For this falling space it is necessary to provide shock-absorbing floors for devices with a free-falling height ≥ 600 mm and for devices with forced movement (e.g., in swings, slides, cable cars, carousels, seesaws, etc.). Proposals for this can be found in the table below under "Possible materials" (according to EN 1176:2017, as well as its Annex I, A deviations). These floors should be properly maintained to prevent a reduction in shock absorption. This maintenance also includes checking that the floors have been properly filled. For this purpose, there are basic markings on the posts or post shoes in the floor area. The basic markings are recognizable as a so-called "welding bead".

Largest possible free fall height For a HIC value > 1000	Possible materials		
	According to EN 1176-1	A-deviation Germany (German)	A-deviation France (France)
≤ 600	No requirements for shock absorption	Concrete/stone Bitumen bonded surfaces	Shock absorbing floors
≤1000	Lawn/topsoil	Topsoil	Lawn/topsoil
≤1500	-	Lawn	-
≤2000	Bark mulch Wood chippings Sand or gravel (minimum layer thickness 200 mm + 100 mm safety surplus)	Bark mulch Wood chippings Sand or gravel (minimum layer thickness 200 mm + 100 mm safety surplus)	Bark mulch Wood chippings Sand or gravel (minimum layer thickness 200 mm + 100 mm safety surplus)
≤3000	Bark mulch Wood chippings Sand or gravel (minimum layer thickness 300 mm)	Bark mulch Wood chippings Sand or gravel (minimum layer thickness 300 mm)	Bark mulch Wood chippings Sand or gravel (minimum layer thickness 300 mm)
Critical drop height as tested	Other materials and corresponding layer thicknesses can be used and tested according to EN 1177:2008.		

Specific material information can be found in EN 1176-1 Table 4. For loose bulk materials, the minimum layer thickness increases by 100 mm.



For devices with a free fall height ≥ 600 mm and / or for forced movement devices (such as swings, slides, cable cars, carousels, seesaws, etc.), it is imperative to provide shock-absorbing floors.

## Special installation notes for 4FCIRCLE® fitness devices

**4FCIRCLE®**  
 So funktioniert {Bewegung}

The device is suitable for use in the public areas purs. to DIN/EN16630:2015.  
**Expressly note that this 4FCIRCLE® fitness device meets the provisions of DIN/EN16630:2015 as well as those of DIN/EN1176:2008.**

We generally recommend a distance of 15 m (in addition to the safety area) from fitness devices purs. to DIN/EN16630:2015 and the general playing operation of a children's playground. If the device undercuts this distance, we recommend grouping fitness devices that visually separate them, e.g. by using the associated notice signs and/or a distance of 5 m (in addition to the safety areas).

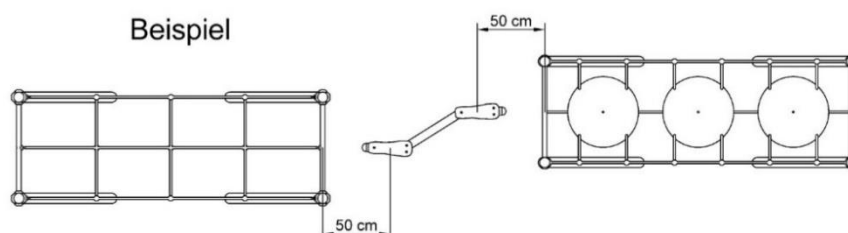
This device may be operated in combination with playground equipment.

## Special mounting instructions for device groups

With reference to DIN/EN1176-1:2017, Chapter **4.2.8.3. Notes 2** and **4.2.8.4** and the same type of movement of balancing equipment, these can be regarded as components of a **group of equipment** in a compilation. Thus, this device may be installed **within the safety area of** a similar device, provided that the function of the device group is thereby guaranteed. We recommend a distance of **approx. 30-50 cm**. An independent check after installation of the device group is recommended.

These include, for example, the following devices from our range:

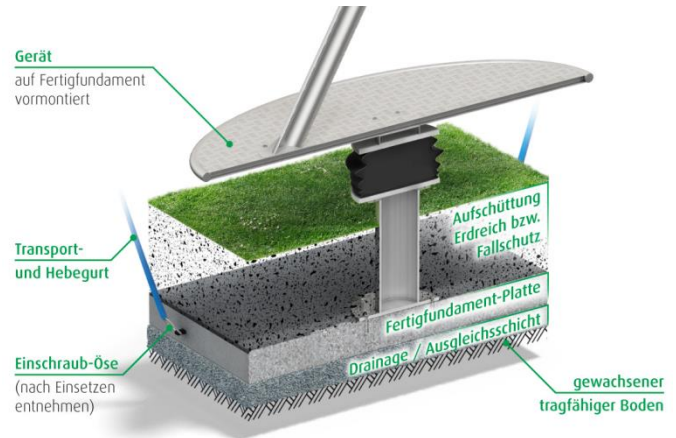
- **Safari park**
- **Fun Run Balancers**
- **Kiddy Parcourse**
- **Water play equipment (pools)**
- **Balancing range from the 4FCircle range**



# Special mounting notes for prefabricated foundations

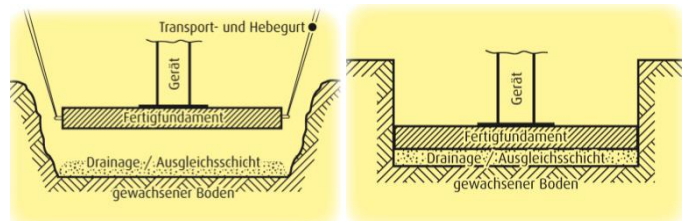
## What must be observed when planning using prefabricated foundations?

1. The prefabricated foundation is made up of reinforced-steel concrete and is **15 cm** thick. The outer dimensions of the prefabricated foundation change along with the device and can be taken from the offer or the delivery note. The prefabricated foundation weighs **approx. 350 to 400 kg per sqm**.
2. Is the place/mounting site accessible for heavy devices or trucks? If not: Is interim transport, e.g. with a wheel loader, stacker or crane, possible?
3. Plan on the corresponding unloading device according to the foundation sizes.
4. When planning, observe a gravel layer of approx. 5 to 10 cm as levelling layer in your plans if applicable.



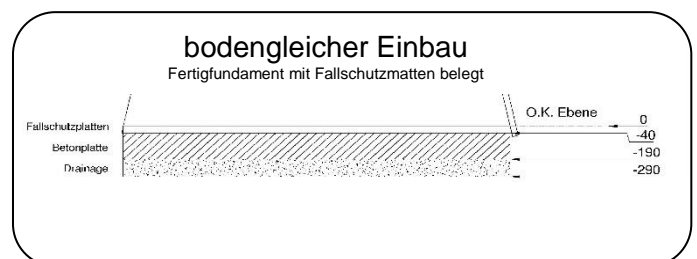
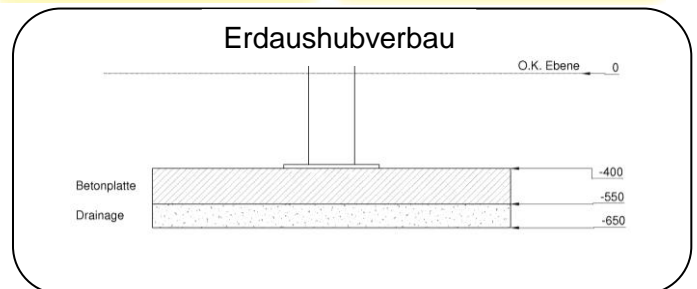
## What must be observed for mounting on prefabricated foundations?

1. Excavation area according to individual prefabricated foundation information (recommendation: add about 10 cm to the specified dimension on either side) **ATTENTION:** The **excavation depth** depends on the device types (excavation shoring or level installation, see drawings below).
2. If applicable, install the **gravel layer** and level it.
3. Introduction of the device with prefabricated foundation (**use the corresponding lifting gear**) and level it.
4. Review all **screw connections** between the device and the prefabricated foundation.
5. Fill the foundation with fall protection material or excavated soil. **ATTENTION:** The distance from the upper edge of the prefabricated foundation to the upper edge of the playing area is 40 cm! (does not apply in case of flush installation)



**Note:** There are cast-in eyelets on the side of some prefabricated foundations to attach transport and lifting belts (to be provided on site).

The device can be played-on at once after completion and ensuring any possibly required fall protection! No annoying and elaborate blocking is necessary!



## Maintenance instructions

### ATTENTION!

**Non-observing of these inspection and maintenance instructions may cause safety defects on and around the device and thus cause potentially severe injury during use. PLAYPARC does not assume any responsibility for damage resulting from non-observation of these instructions.**

**Compliance with the maintenance instructions is necessary for warranty.**

Playing, weather influences and deliberate destruction may cause wear that at the same time means a loss of safety and function.

In case of safety-relevant defects, quick action is needed, either by immediate repair or by demolition or shut-down of the device. If repairs cannot be performed at once, access to the respective part of the playing equipment must be blocked.

Defects that impair function also reduce the usage value of the device and inspire deliberate destruction that may cause a loss of safety. Immediate reaction is recommended here as well.

This guideline is to provide you with some help when servicing and repairing PLAYPARC-devices. Use the installation instructions for maintenance as well, since they include important information on the playing equipment's setup.

The device should be inspected and serviced every day/week, month/season and every year. For the inspection intervals, see the following table. If your device is subject to strong wear or severe weather, more frequent servicing may be necessary than recommended in these instructions.

**You as the owner are responsible for servicing of the device and its environment to ensure safety of the playing equipment.**

**Maintenance and repair must be performed by qualified persons only.**

From time to time, parts must be replaced due to breakage or wear. Such parts should be replaced at once in order to ensure safe use. Repairs should be performed in correspondence with these maintenance instructions and the installation instructions.

For required spare parts, see our spare parts catalogue or our website: <http://www.playparc.de>.

If you have any questions or if you need any help, contact your sales partner or our employees.

Maintenance Instruktion			Visual Routine-Inspection	operative Inspektion	Yearly Main inspection
Part	Inspection	Maintenance			
Cleanliness	Is there any contamination on and around the playing equipment (earth, leaves, branches, dirt, etc.)?	Remove earth, leaves and dirt on and around the playing equipment.	x	x	x
	Has water collected in the device or are the outflow openings clogged?	Remove water and expose drain openings.		x	x
Parts outside of the device	Have any products been tied to the playing equipment that are not part of the device? Examples: Jumping ropes, clothes, etc.	Remove elements.	x	x	x
Damaged or defective parts	Have any damaged or defective parts been found?	Replace or order as necessary.	x	x	x
Connections	Have any loose screw connections been found?  Are the rivets undamaged and tight?	Tighten the connections, replace them if necessary. Replace damaged nut covers by new ones.		x	x
	Are there any cracks or gaps in the slides, sliding rods, roofs or the railings?	Tighten loosened or misadjusted device parts. Seal cracks. If this is not possible, contact a PLAYPARC employee. He will provide you with a possible solution.		x	x
Sand and water games	Do the connections or exposed parts have any leaks or damage?	Replace or repair as necessary.		x	x
	Is the function of the pump impaired?	Replace or repair as necessary.		x	x
One-legged playing equipment	Does the supporting pillar of the device show cracks, rot, corrosion or wear, and does this impair stability?	Replace or repair at once!	x	x	x

**Usage note:** Perform the maintenance described if you can answer the questions asked here with **Yes**.





Maintenance Instruktion			Visual Routine-Inspection	operative Inspektion	Yearly Main inspection
Part	Inspection	Maintenance			
<b>Moving parts</b>					
Moving parts	Is the function of moving parts limited or is wear visible on them?	Replace if necessary.		x	x
	Are the protection caps undamaged and located in the intended places?	If applicable, exchange or install missing protective caps.	x	x	x
Suspension elements	Do the elements show any cracks, other wear or are they worn by more than 60%?	Replace element.		x	x
Bearing, turning parts and swing suspension	Is movement partially or completely impaired or uneven?	Replace parts. The joints do not need to be lubricated, since the bearings used are all maintenance-free.		x	x
<b>Components/materials</b>					
GFK-slides	Are there any holes or are the glass fibres visible due to wear?	Repair or replace as necessary.		x	x
Ropes/nets	Is any wear visible?	Barbed wire may be visible. If the barbed wire is frayed, the rope must be replaced.		x	x
Chains	Is damage or corrosion visible at the chain?	If they are worn by more than 60%, they must be replaced.		x	x

**Usage note:** Perform the maintenance described if you can answer the questions asked here with **Yes**.

Maintenance Instruktion			Visual Routine-Inspection	operative Inspektion	Yearly Main inspection
Part	Inspection	Maintenance			
Chains	Is the ground clearance or tension of the chain too low?	The suspension length and tension of the chain must be adjusted according to the installation instructions.		x	x
	Are the chains twisted?	Correct if necessary.		x	x
Springs	Do the clamps show any wear, tear tracks, cracks, deformation or rust?	Replace or repair as necessary.		x	x
	Do the springs show any wear, tear tracks, cracks, deformation or rust?	Replace or repair as necessary.		x	x
Steel cables	Is there any wear, damage or corrosion?	Frayed or damaged steel cables must be replaced.		x	x
	Is the cable tension too low?	Adjust the tension according to the installation instructions.			x
Plastic and rubber	Do the plastic and rubber parts show any wear, damage or cracks?	Replace parts as necessary.		x	x
Wood	Does the wood show any splinters, cracks, rot or wear?	Replace or repair as necessary. Wood is alive and therefore will form cracks after a while. Smaller cracks do not influence the quality and safety of the device.		x	x
	Is wear on the protective glaze of the plywood panels visible around the edges?	Treat pre-treated plywood panel edges if cracks form (e.g. Induline SW910/ Remmers Baustofftechnik GmbH).		x	x

**Usage note:** Perform the maintenance described if you can answer the questions asked here with **Yes**.



<b>Maintenance Instruktion</b>			Visual Routine-Inspection	operative Inspektion	Yearly Main inspection
Part	Inspection	Maintenance			
HPL panels	Do the HPL panels show excessive wear? Are there any sharp edges or is any other damage visible?	Replace or repair as necessary.		x	x
General metal parts	Are there any sharp edges? Are the welds undamaged?	Replace or repair as necessary.		x	x
Painted steel	Are there any scratches, is there any wear or corrosion?	Replace the coat of paint by removing the corrosion and applying suitable paint or replacement of the parts if necessary.		x	x
Galvanisation	Are there any scratches, is there any wear or corrosion?	Small scratches will disappear on their own. Larger damage must be repaired. Replace if necessary.		x	x
Aluminium	Is there any damage or wear?	Replace if necessary.		x	x
<b>Foundations</b>					
Foundations	Remove the fall protection lining: Do the foundations show wear or cracks in the base area?	Replace or repair as necessary.		x	x
	Constructions with one load-bearing pillar: Does the foundation show any cracks or wear or is stability of the devices impaired?	Expose or dig out the parts. Repair or replace as necessary.		x	x
	Is stability of the foundations impaired and are there any sharp edges?	Stabilise foundations and correct lining.		x	x

**Usage note:** Perform the maintenance described if you can answer the questions asked here with **Yes**.



Maintenance Instruktion			Visual Routine-Inspection	operative Inspektion	YearlyMain inspektion
Part	Inspection	Maintenance			
<b>Surfaces and linings</b>					
Fall protection	Does the loose filling reach the basic mark on the devices or is the height of the fall protection according to the information in the installation instructions?	Correct if necessary. Special attention must be paid to the areas subject to strong play, e.g. below the swings and in the outlet area of slides.	x	x	x
	Does the strength of the loose fall protection correspond to the data specified in EN1176-1:2008 table 4?	Correct if necessary.	x	x	x
	Is the rubber lining damaged?	Repair if necessary.			x
	Has the surface curved to form a tripping hazard?	Correct if necessary.			x
Signage	Have the labels on product use and the signs of the facility become illegible?	Replace if necessary.		x	x

**Usage note:** Perform the maintenance described if you can answer the questions asked here with **Yes**.

MAINTENANCE RECORD

Device designation:  
Site:  
Date of initial commissioning:

Day of device inspection	Expert auditor	Defects found	Device is OK	Device can still be used	Device is blocked	Defects removed by	Day of removal of defects

For further maintenance logs, see our website [www.playparc.de](http://www.playparc.de).