

## USE CASES

The Rapid Foundation System developed by paXos is a sustainable anchoring solution for a wide range of applications:

- › **Ground-mounted PV systems and fences**
- › **Containers and prefabricated buildings**
- › **Traffic signs and lights**
- › **Large umbrellas**
- › **Masts**
- › **Guard rails**
- › **Advertising boards**
- › **Sound barriers**
- › **Charging stations**
- › **Wind turbines**



In addition to elevated pile loads, the paXos RFS can also be used for **building loads (BL)**, e.g. to base containers or prefabricated buildings. In this case, a special attachment distributes the weight load ideally over the precast concrete slab, allowing up to **16 tons of load** per foundation slab to be absorbed.

In addition, a height-adjustable element is integrated in the RFS-BL, which eliminates the need for a frost-free foundation because it can simply be readjusted when the ground is set. This saves considerable costs in the overall construction planning and execution, especially in the earthworks.



We support you in your projects in the areas of energy technology, automotive and industry from the initial product idea through prototype construction to the start of series production or from the greenfield to the finished factory and production start. In our innovation division, we also develop highly efficient and forward-looking solutions in the field of renewable energies and electromobility. We look forward to getting in touch with you!



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## RAPID FOUNDATION SYSTEM



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## ADVANTAGES

The RFS enables cost-effective and fast installation with proven machines as well as immediate loading. Due to the derived tree root principle, high bending and compression stiffnesses can be realized. Occurring wind and weight loads from superstructures are reliably absorbed.

In contrast to conventional systems, significantly less material is required, which is also easy to dismantle, so that surfaces are not permanently sealed. No pollutants are released into the soil, as is the case when cast-in-place concrete is used, and larger stones in deeper soil layers are not a problem due to the shorter earth screws.

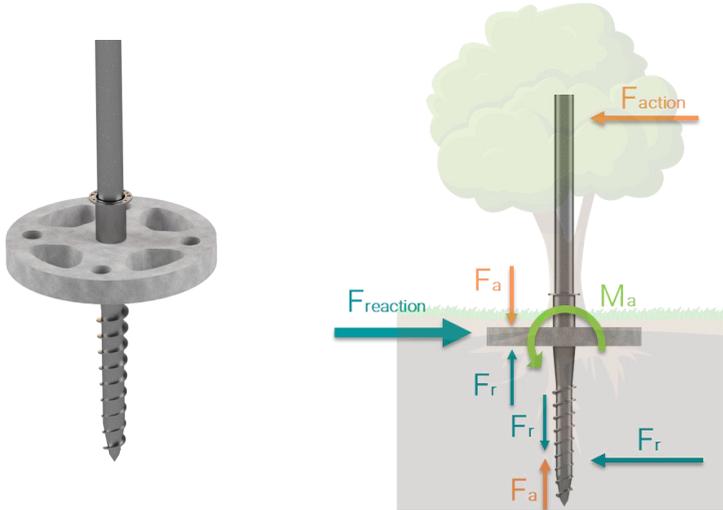


- High bending and compressive rigidities enable larger superstructures
- Imitation of the tree root principle by combination of earth screw with shear compression bending plate
- Fast installation and immediate loading possible
- Environmental protection due to complete retrofitability and no pollutants entering the soil
- Less material input than with conventional concrete foundations

## FUNCTIONAL PRINCIPLE



The paXos Rapid Foundation System (RFS) imitates the tree root principle. Central taproots absorb high tensile forces and surface roots absorb the bending and shear forces. The RFS therefore combines an earth screw, which absorbs the tensile forces, with a rigid prefabricated concrete slab, which is placed just below the turf and absorbs the bending and shear forces.



## INSTALLATION & TECHNICAL DATA

The RFS is installed using already proven methods. The earth screw is a widely used product, so inexpensive machines for screwing it in are already available. Excavation of the earth layer for insertion of the rigid slab is also simple and inexpensive.

Conventional fastening systems rely on the production of concrete on site or large machines for driving the posts into deep layers of soil. In comparison, paXos' RFS eliminates waiting time and multiple on-site operations caused by the setting time of poured concrete.

Parameter	RFS
Dimensions (D x H) [mm] Concrete Plate	(500 – 650) x (80 – 100)*
Mass	40 – 50kg*
Fire Behavior	Fire Protection Class A1
Harmonized Norm	DIN EN 1339
Raw Density (Average)	2.3kg/dm <sup>3</sup>
Breaking Load Class	Class 3
Bending Tensile Strength Class	Class 2 (T)
Frost Resistance / Weather Resistance	Class 3 (D)
Moisture Expansion	None

\* Depending on the application and load case

You can find more information about our products here:

