R-KER II bonded anchor
Durability and reliability tailored to your needs

It is clear to all professionals that bonded anchors are typically designed for applications where using mechanical fixings is either unfeasible or simply difficult at the least, for reasons such as interaxial spacing, distance from an edge, substrate thickness or dampness. There are obviously numerous solutions that come in handy whenever this is the case, and the clients’ final choice usually relies on the needs they consider crucial for the given job: load capacity parameters, wide range of hole diameters or suitability for a broad spectrum of temperatures. Rawlplug’s engineers and designers have decided to develop a product that would make all such dilemmas irrelevant. It is the R-KER-II bonded anchor.

More than 90% of professional construction fixings

The latest solution from Rawlplug, the R-KER-II bonded anchor, is based on a hybrid resin formulation. It is a highly specialised mixture of vinyl ester with some cement additive whose properties and proportions were tested and proven on numerous occasions. Preparing the final recipe of the product, our R&D Department experts focused on ensuring that a single mixture would offer a combination of features that construction professionals consider most relevant. Their efforts have brought you Rawlplug’s hybrid solution which may be an alternative to expensive epoxy resins, both in terms of very high load capacity and substrate adhesion. There is more, since the product is available in versions suitable for application at high temperatures (as high as +120°), which ensures optimum bonding that matches the needs depending on the weather conditions in seasons when construction works are performed. Combining the above advantages with the wide range of diameters of drill bits that can be used along with the R-KER II, what you receive is a product that matches the requirements of more than 90% of professional construction applications, starting from typical fixing of safety railings, shields, scaffoldings or machinery, to end up with highly specialised installation works using dedicated bars, e.g. post-installed rebars. There can be no doubt.
Dustless Drill bits – installation reliability certified

You already know that the R-KER II bonded anchor is the right choice for deep anchoring as well as for a broad range of bar diameters – even up to 40 mm. But there is more in stock for Rawlplug’s clients. The R-KER II fixing system along with the Dustless Drill bit form a state-of-the-art solution that can automate the application hole preparation process, and more importantly, one which guarantees absolute installation reliability, and consequently – safety of use. How is this possible? It is for the automatic extraction of drillings that contractors are offered far more benefits than just reliability in installation. Firstly, drilling and hole cleaning proceeds simultaneously. Secondly, a hole thus developed is clean and ready for resin injection. This eliminates the potential for the most frequent mistake made while installing bonded anchors, namely inappropriate hole cleaning. Moreover, everyone knows how that time matters at construction sites, and with the Dustless Drill bits in use, the R-KER II anchoring system enables you to save even up to 40% of time compared to full resin application. Another fact of great importance is that such a method eliminates the risk of drilling dust inhaling thanks to the dust removal technology. What Rawlplug also took into account while working on the new product was the latest requirements applicable at construction sites in an increasing number of countries, such as OSHA in USA or HSE in the United Kingdom. However, what matters most in this respect is that a hole developed and cleaned in such a precise manner guarantees high load capacity and substrate adhesion, while the reliability of application and the follow-up operation of the R-KER II system supported by the Dustless Drill bits has been confirmed by the relevant European Technical Assessment (ETA). Yet it is the client who makes the final decision, and so it should be noted that before application of the R-KER II, holes can also be cleaned by the traditional blowpump and brush method (4x, 4x, 4x) or using compressed air (2x, 2x, 2x).

Another piece of evidence for quality. RT-MAXH

Speaking of the Dustless Drill bits, one must not forget about the RT-MAXH version. Why? Because it features 3 deep-set carbide tip plates that significantly improve the drill bit’s service life and performance, while the 4 cutting edges accelerate the drilling itself, increasing overall efficiency of the entire hole preparation process. The RT-MAXH Dustless Drill bit is made of steel with hardness of 52 HRC, which directly improves the product’s service life and matters greatly to optimisation of construction costs, but which primarily ensures unmatched quality, cylindricity and axiality of drill holes, as confirmed by the international SicherSafe certificate.

Mixing and application precision

The R-KER II comes with a dedicated applicator featuring a specially designed and longer mixing tube. Rawlplug has proved its attention to detail again: such a mixing tube is a 100% guarantee of well mixed resin, which enables you to make the most of the potential that rests with its chemical composition. And this is not all when speaking of attention to detail among Rawlplug’s engineers. The mixing tube features convenient graduation that enables the contractor to keep the amount of the substance released in application under full control, since one is capable of precisely determining the required amount of resin depending on the hole diameter and depth. It proves particularly important when

Application of hybrid resin formulation – dedicated mixture of vinyl ester and cement

Product intended for deep anchoring and for rebars with a very wide range of diameters and coatings

Possibility to drill and clean holes at the same time, reducing the full resin application time by up to 40%

Suitability for use in temperature as high as +120°C

Automation of hole preparation thanks to the Dustless Drill bits

Most extensive certification in the group of bonded anchors: ET, C1, VOC, R240, and electrical resistance; the R-KER II resin is officially approved for application with rebars to depths of as much as 1.5 m using the post-installed rebar technology
anchoring in series in a larger number of holes. As usual, the brand has also proved its attention to the sustainable development policy it has implemented, which translates into environment-friendly behaviour, as highly precise application of resin minimises waste but also - again, it adds to the client’s cost optimisation thanks to Rawlplug’s streamlining concepts.

**What are your needs?**

The selection of solutions based on the R-KER II bonded anchor from Rawlplug ensures far more than the wide range of capabilities in terms of holes developed for bars of different diameters, but also a multitude of bars themselves, certified under the ETA scheme. Rawlplug is the only brand that can actually document it. Its portfolio of available fixing pieces is truly impressive, including threaded rods, internally threaded sockets and rebars made of steel of various classes and in diverse coatings. Every professional knows that it is the latter that ensure protection of steel substrate against corrosion. Rawlplug delivers its products with electroplated (ZP), hot-dip galvanised (HDG) or zinc flake (ZF) finish, as well as in the UHS ZF variation for steel of higher classes, A4 stainless steel and HCR bars characterised by unparalleled corrosion resistance. The zinc flake coating is particularly worth your attention, and not just because Rawlplug is the only supplier that offers it. Salt spray corrosion resistance tests of zinc flake coated products have delivered the outstanding result of 1,500 hours of resistance, being a unique competitive advantage over other products made of carbon steel, and under certain conditions, even over class A2 stainless steel. In other words, what clients receive from Rawlplug is a selection of products ready to be used in an extremely vast spectrum of corrosive environments, from C1 to C5.

This also applies to the range of substrates for which the new bonded anchor is intended: both cracked and non-cracked as well as damp, wet and completely water-flooded. Designed for strengthening and extension of reinforced elements and deep anchoring, even to depths of 1.5 m, the R-KER II truly ensures the competitive edge in the broadest scope of professional construction applications.

Hybrid resin from Rawlplug is a product covered by the most extensive certification in the group of bonded anchors. Both the European Technical Assessment and the SicherSafe certificate add to the C1 seismic performance category of the product, meaning that it can be used in structures erected on seismically active land. The R-KER II is resistant to electricity, and it is covered by certificates issued by the National Institute of Hygiene as well as by VOC certification, which will prove relevant to application under green building technologies in the future. Moreover, anchoring structures resistant to fire requires fireproof fixings. Therefore R-KER II has undergone additional fire tests certification scheme which confirms its suitability for such conditions.

And if you add the recommended accessories to the package, what you receive is a perfect product that satisfies the expectations of even the most demanding and versatile contractors.

**Delivering state-of-the-art solutions you can trust**

Once again, Rawlplug has kept their promise conveyed in the company mission. Owing to the reliable fixing system, the easy, quick and convenient installation, the load capacity second to none in the product class as well as suitability for use in a wide range of temperatures, extensive certification and broad spectrum of applications, the R-KER II bonded anchor is as trustworthy as
Rawlplug’s entire comprehensive product portfolio. It is complemented by highly specialised services available to the brand’s clients free of charge, comprising both technical advisory and tools for designers. In this respect, EasyFix is particularly worth your while: it is Rawlplug’s proprietary application enabling you to run design calculations needed to develop the required fixings of different types of structural elements. Another one is the Technical Library which allows you to choose from as many as 15 categories of information and documents you will find indispensable to pick suitable highly specialised products from Rawlplug and to use them correctly. Moreover, the brand’s clients are granted access to different forms of training conducted under the Rawlplug Academy programme, dedicated to education, competence building as well as knowledge and experience sharing, designed to reflect the actual needs of engineers, designers and contractors. Check it on rawlplug.com.

The R-KER II anchoring system with the Dustless Drill bits stands for 100% certainty of sufficient installation hole cleaning and even as much as 40% of resin application time saving.

**Standard drilling**

![Standard drilling](image1)

**Hollow drill bit**

![Hollow drill bit](image2)

**Hole in need of cleaning before resin application**

**Hole ready for resin application**