

RXE rockfall protection barriers from 500 to 8000 kJ

**MAXIMUM SAFETY
IN THE TIGHTEST OF SPACES**

FOR THE MOST VALUABLE ASSET IN LIFE: OUR SAFETY.

Klokova, Greece: Installation of a pre-assembled RXE-5000 rockfall protection barrier, 2015.

The danger of rockfalls is increasing due to climate change. This was once restricted to mountainous regions, but expanding urban areas close to rocky slopes are increasingly at risk. As conventional protective structures are often unable to withstand impacts, we have developed our **RXE barriers**. With their unique low deflection levels, they provide reliable protection for both people and infrastructure.

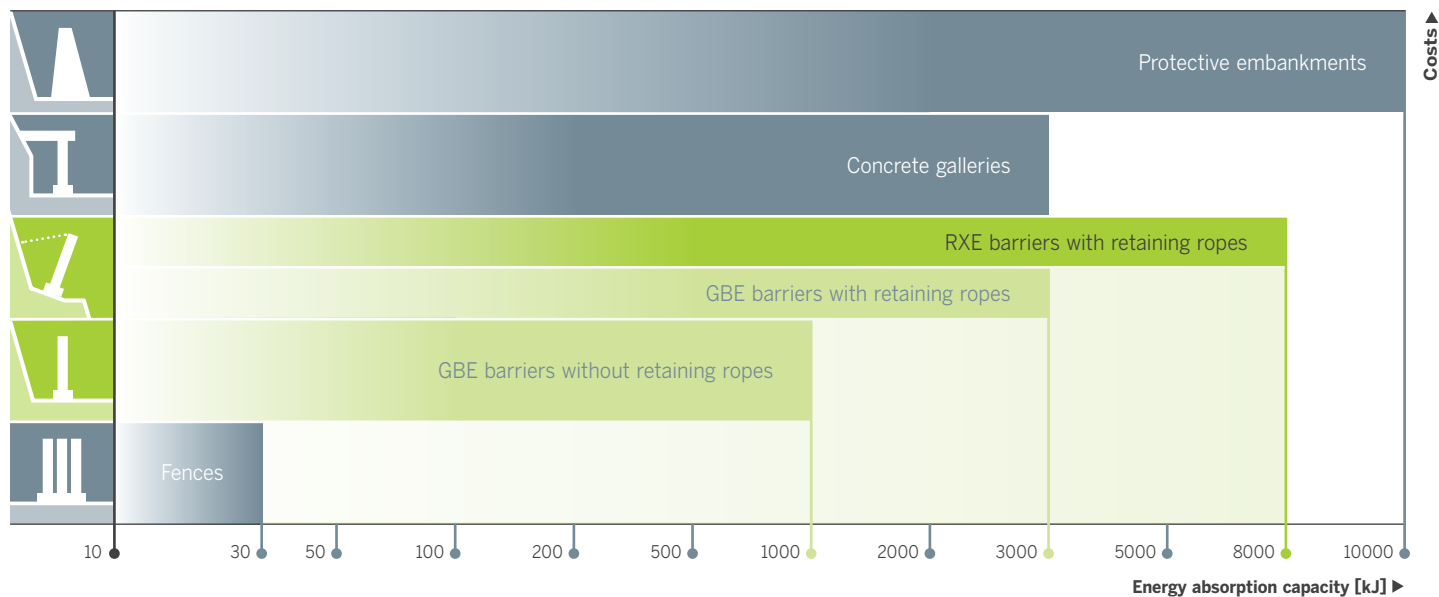
WE CAN PROVIDE YOU WITH THE COMPLETE SAFETY PACKAGE.

At your request we can take on the role of **consultant**, **planner** and even **project manager**. Both the solutions we offer and the quality of our customer service is valued by our customers. For us excellent service is an integral part of every single project. No matter which phase of the project you are in, we will provide you with the support and expertise required to achieve the best results – saving you both time and money.

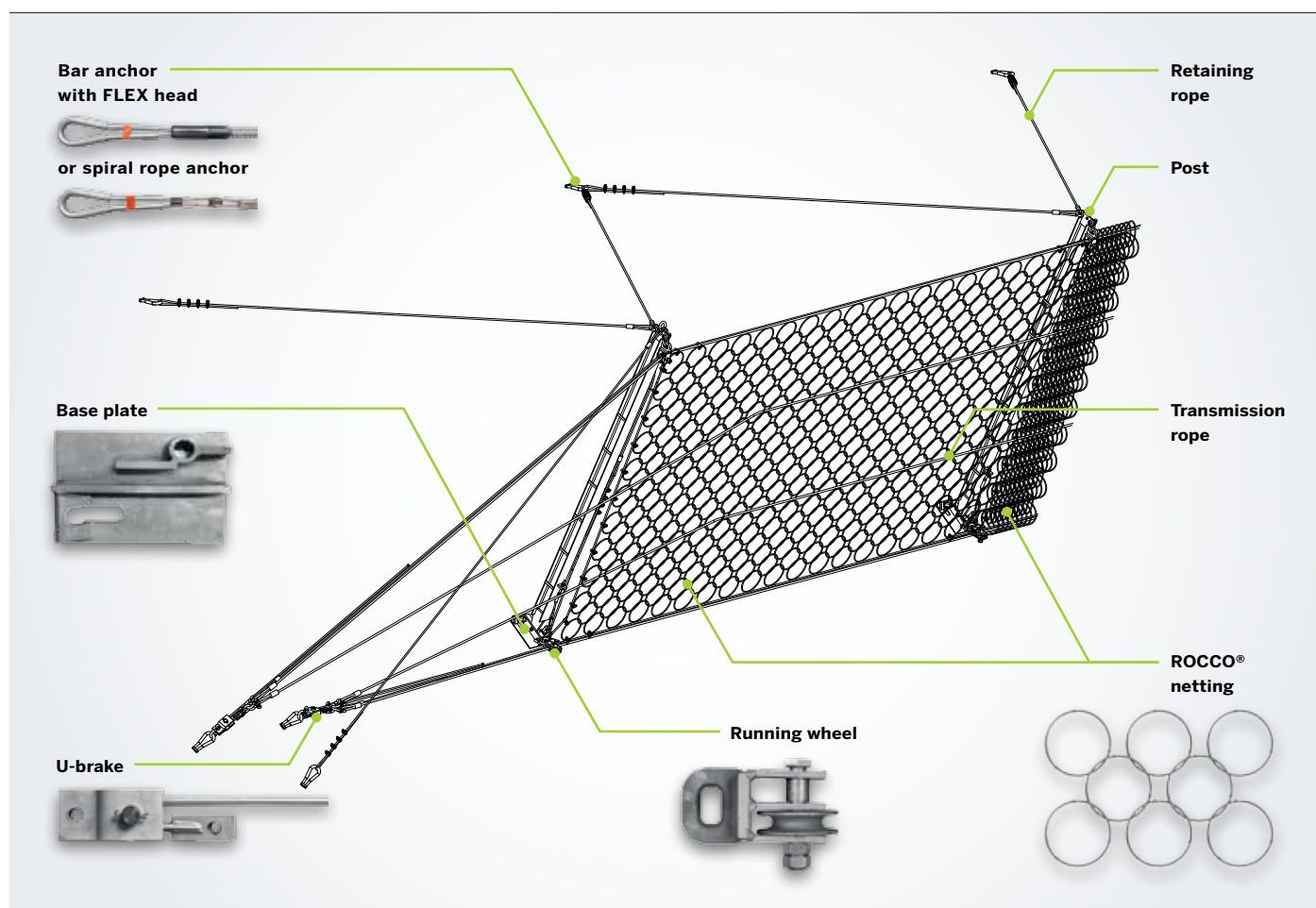


FIRST-CLASS RESULTS IN ALL ENERGY CATEGORIES.

Comparison of rockfall protection systems



Example: Components of the RXE-1000 barrier



QUALITY YOU CAN RELY ON.

With our many years of experience as the market leader for rockfall protection solutions, our **RXE series** combines cutting-edge technology with high-tensile steel wire nets. With its **low weight, unobtrusive appearance, and exceptionally low deflection**, this barrier is an impressive solution allowing it to be installed in close proximity to infrastructure. The energy absorption capacity of the RXE-8000 barrier, for example corresponds to a boulder weighing 20 tons in vertical free fall hitting the net at over 100 km/h.

Our RXE barriers provide the following features:



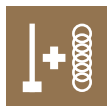
High-tensile steel wire net

Protection against dynamic loads up to 8000 kJ. Some of the energy is dissipated by means of elastic/plastic net deformation while the majority is dissipated by the braking elements.



Low deformation

Testing that replicates field conditions has confirmed that this solution offers the lowest deflection on the market. This makes it ideal for installing in close proximity to at-risk objects.



Pre-assembled

The posts are delivered to the construction site as modules with pre-installed bundles of netting for easy installation (RXE-500 to RXE-3000 systems). This significantly reduces the installation time.



Highest standards worldwide

The only barriers to have been tested and approved according to ETAG 027 and in vertical free fall according to FOEN, the strictest regulation in the world.



U-brake with stainless steel

This component enables linear energy dissipation and is easily accessible for inspection and maintenance. Stainless steel makes the brake extremely durable even when subjected to strain.



Light and unobtrusive

The low weight of the barrier means that it can be easily installed. With its high-tensile steel wire and innovative design, this solution conserves materials, protects the environment and is virtually invisible from a distance.



First-class corrosion protection

The corrosion protection of our systems will last for generations. This means that our customers benefit from particularly low maintenance costs.

WE DON'T LEAVE SAFETY TO CHANCE.

Our systems are developed in Romanshorn, Switzerland. They are tested under the supervision of and in cooperation with research institutes and certification bodies, using test facilities including the world's first for the rockfall barrier approval tests. This means our customers can be sure that RXE barriers meet the **strictest requirements**.

- ▶ Tested under demanding vertical drop conditions
- ▶ All energy categories for the RXE series are certified according to the Swiss **FOEN Directive** and the European Directive **ETAG 027**

Test facility in Walenstadt, Switzerland: full-scale test of the RXE-2000 barrier.

TECHNICAL DATA:

SPECIFICATIONS	GBE-100A-R	RXE-500	RXE-1000	RXE-2000	RXE-3000	RXE-5000	RXE-8000
Energy category ¹ (ETA/FOEN)	0/1 (100 kJ)	2/3 (500 kJ)	3/5 (1000 kJ)	5/7 (2000 kJ)	6/8 (3000 kJ)	8/9 (5000 kJ)	8/9 (8000 kJ)
Approval no. ETA ²	ETA 15/0304	ETA 15/0025 ETA 15/0622	ETA-13/0225	ETA 13/1047	ETA 14/0362	ETA-11/0305	ETA-12/0213
Certificate no. FOEN ³	S 14-6	S 14-5	S 13-1	S 13-2	S 14-4	S 14-3	-
CE mark	1301-CPR-1117	1301-CPR-1141	1301-CPD-0882	1301-CPR-1002	1301-CPR-1022	1301-CPD-0914	1301-CPD-0915
ROCCO® ring net type	-	7/3/350	7/3/300	12/3/350	16/3/350	16/3/350	19/3/300
Mesh type	TECCO® G80/4	-	-	-	-	-	-
Wire Ø	4 mm	3 mm	3 mm	3 mm	3 mm	3 mm	3 mm
Mesh width	80 mm	-	-	-	-	-	-
Ring Ø	-	350 mm	300 mm	350 mm	350 mm	350 mm	300 mm
Rope Ø	12/14 mm	12/18 mm	16/22 mm	16/22 mm	16/22 mm	20/22 mm	22 mm
Number of U-brakes for approx. 80–100 RM	-	4 x U-150-60/13	4 x U-300-K1620	4 x U-300-R20	2 x U-300-R20 2 x U-400-R20 2 x U-400-60/5	12 x U-300-R20	2xU-400-R20/U-400-FL 6 x U-400-R20 6 x U-300-R20
Post type	RRW/HEA	HEA	HEA	HEA	HEA	HEA/RRW	RRW
Post spacing	6–12 m	6–12 m	6–12 m	8–12 m	8–12 m	8–12 m	8–12 m
Standard barrier height	2/2.5/3 m	2/3/4/5 m	3/4/5/6 m	4/5/6/7 m	4/5/6/7 m	5/6/7/8/9 m	6/7/8/9/10/10.5 m
Heights with ETAG 027 approval	2–2.5 m	3–5 m	4–5 m	5–6 m	5–6 m	6–7 m	7–8 m
Heights with FOEN certificate	2–3 m	3–4.5 m	4–6 m	5–7.5 m	5–7.5 m	6–9 m	7–10.5 m
Maximum deflection ¹	2.45 m	3.60 m	4.36 m	5.80 m	6.97 m	8.15 m	8.45 m
Residual useful height in the impact zone ¹	> 50 % (Cat. A)	> 50 % (Cat. A)	> 50 % (Cat. A)	> 50 % (Cat. A)	> 50 % (Cat. A)	> 50 % (Cat. A)	> 50 % (Cat. A)

¹According to ETAG 027 | ²See **ETApprovals** at <http://www.eota.eu> | ³According to the Swiss directive

We reserve the right to make technical changes.



Take a look at our RXE film on YouTube:
www.geobrugg.com/RXE-clip



More information is available on our website:
www.geobrugg.com/rockfall



Your local Geobrigg specialist:
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