

**Ring net barriers made of high-tensile steel wire**

**THE ECONOMICAL SOLUTION  
TO DEBRIS FLOW**



# FOR THE MOST VALUABLE ASSET IN LIFE: OUR SAFETY.

Milbach, Hasliberg, Switzerland: Installation work on an LUX barrier, 2009.

Climate change, torrential rainfall and other meteorological events are resulting in a global increase in debris flows and hence the need to mitigate their destructive potential.

Our flexible ring net barriers made of high-tensile steel wire provide innovative and efficient protection for both people and infrastructure. These systems are characterized by their simple designs, short installation times and the discreet way they blend into their surroundings.



# 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 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.

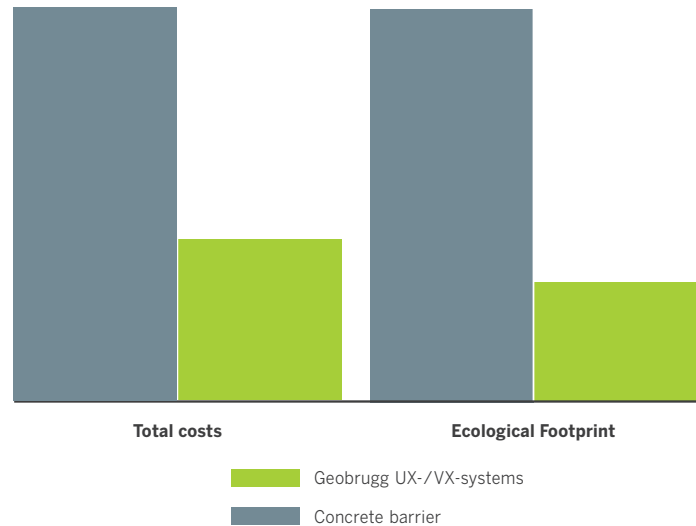


# SIMPLE DESIGN, FLEXIBLE FUNCTION.

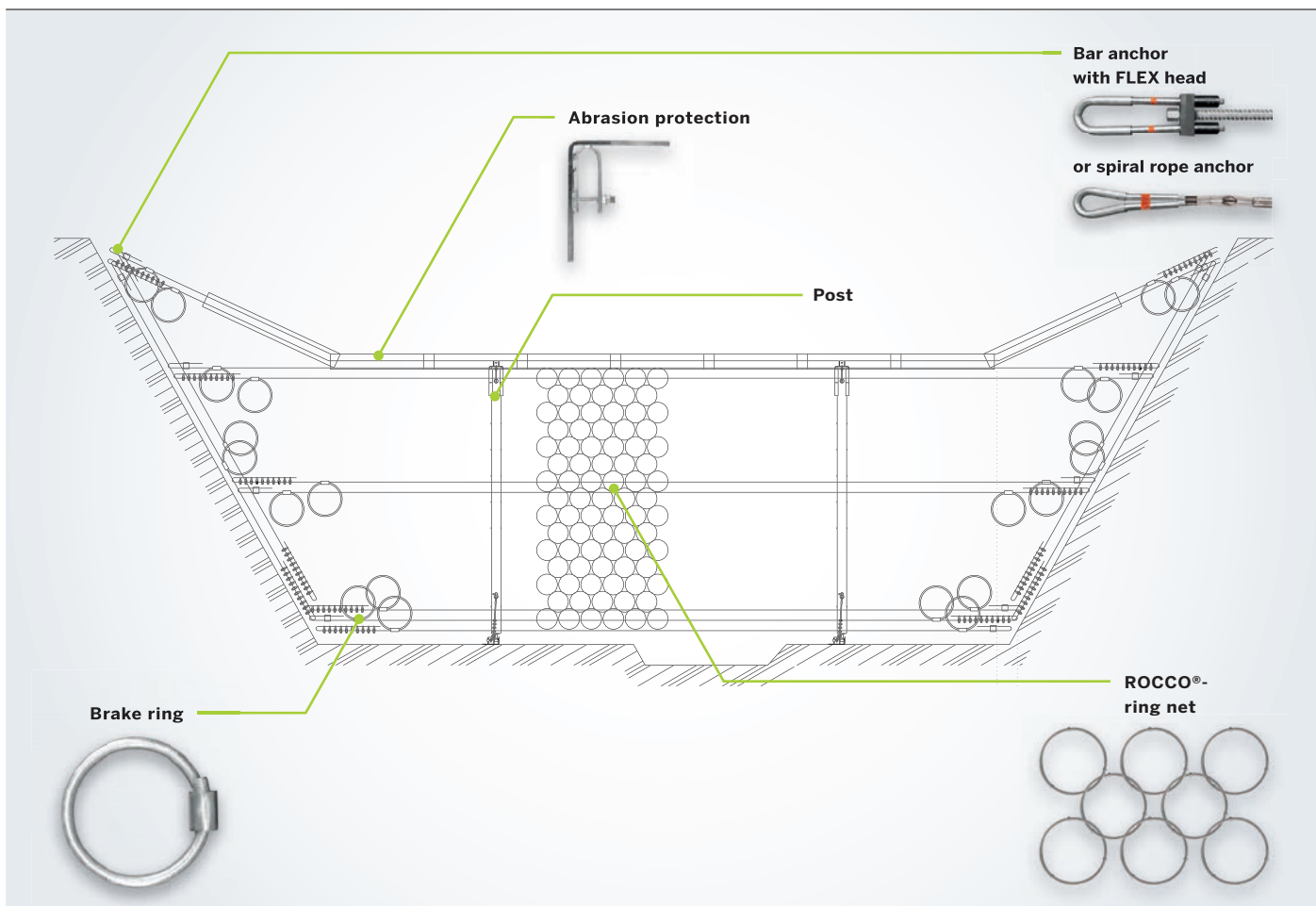
## Comparison of conventional channel structures and our UX / VX systems

Our ring net barriers are able to withstand **high static and dynamic loads**. They can be installed with minimal materials and effort, offering considerable savings in terms of cost and construction time.

Compared against conventional solutions, which require large-scale earthwork and concrete work on rough terrain, our flexible systems really deliver particularly when it comes to efficiency.



## Example: Components of our UX debris flow barrier



# QUALITY YOU CAN RELY ON.

In addition to great durability **our flexible ring net barriers ensure that water flows unimpeded**. They can also be **implemented in several levels** behind one another. Ensure to this and the drainage effect of the net, the retention capacity of the solution increases significantly should an event occur, allowing solid material such as scree and drift wood to be reliably held back.

Depending on the channel properties we will recommend one of two different types of debris flow barrier systems. **The UX series offers debris flow barriers for wider channels**. Whereas narrow-cut torrents use **the VX system, which span the channel without the need for posts**. All our barriers have one thing in common; they have been tested in several 1:1 large-scale field tests and have demonstrated their functional capability.

## Our UX/VX debris flow barriers provides the following features:



### High-tensile steel wire net

Optimum combination of stability and flexibility. The barrier absorbs high dynamic and static loads, allowing the net to retain its protective effect even when full of debris.



### Complete systems tested

Our barriers are the only debris flow protection solutions to have been tested in large-scale field tests under an extremely wide range of conditions.



### Easy installation

Lightweight components reduce the amount of work required during transport and construction. The barriers are easy to adapt to any terrain, offering both time and cost savings.



### DEBFLOW dimensioning tool

Thanks to the quick and efficient dimensioning provided by our special tool, reliable functioning is guaranteed, even with multilevel barriers.



### 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.

Test site in Illgraben, Switzerland: in field test of a VX barrier

Together with the Swiss Federal Institute for Forest, Snow and Landscape Research (WSL), we carried out extensive laboratory and field tests. These tests have demonstrated that our VX/UX ring net barriers are able to withstand significant debris flow loads. Based on these results and experience, we have developed our **DEBFLOW dimensioning tool**. This dimensioning software is free available on [myGeobrugg.com](https://myGeobrugg.com).



# PROVEN RELIABILITY WORLDWIDE.



Our DEBFLOW dimensioning tool is available here:  
[applications.geobrugg.com](https://applications.geobrugg.com)



Your local Geobrug specialist:  
[www.geobrug.com/contacts](http://www.geobrug.com/contacts)

**AUTHORISED DISTRIBUTOR**

 **ALPHA  
PINNACLE**

**Alpha Pinnacle Sdn Bhd** (1108444-U)  
A-06-01, First Floor, Garden Shoppe @ One City,  
Jalan USJ 25/1F, 47650 Subang Jaya, Selangor, Malaysia  
Landline : (603) 5885 3828 Facsimile : (603) 5885 3830  
Email : [contact@alphapinnacle.com](mailto:contact@alphapinnacle.com) URL : [www.alphapinnacle.com](http://www.alphapinnacle.com)

**Enhancing Sustainable Development**

**Specialist in Geosynthetic Solutions**

**Geobrug AG**  
Aachstrasse 11 | 8590 Romanshorn | Switzerland  
[www.geobrug.com](http://www.geobrug.com)

**A BRUGG GROUP COMPANY**