

Aqualog

Aqualogs are a novel soft engineering solution that trap sediment, improve water quality and allow a durable soft engineering approach to bank reinstatement.

What are Aqualogs made from?

Aqualogs are made from Xylit. Xylit fibre is a byproduct of brown coal production in Germany, which would ordinarily be landfilled. This natural woody fibre exists in large quantities and needs no additional energy in its production.

Xylit fibre is extremely robust and elastic, it is able to withstand mechanical stress and biological degradation.



Aqualogs available in 2*0.2 m.

Comparison of Xylit fibre rolls to other materials:

	Durability	Colonisation Ability	Weight
Brushwood fascines	2 years	average	4 g/m
Coconut coir logs	5 years	high	8 kg/m
Aqualogs	>30 years	very high	20kg/m
Rock Rolls	>100 years	high	50 kg/m

Outstanding soft engineering

Technical advantages

- high tensile strength
- >30 years design life

Ecological and biological advantages

- sustainably sourced biochar from Europe
- soft engineering approach using natural material
- high surface area promotes microbial activity
- designed to support silt control and accretion
- protective qualities allow plant establishment
- proven to adsorb phosphate



Aqualogs used as soft engineering bank protection.



Aqualog - biochar fibre roll



How are Aqualogs used?

Aqualogs are used for soft bank protection and habitat creation as a more durable alternative to coir rolls.

They also work as a silt control filter, reducing speed of flow and trapping sediments in aquatic and terrestrial situations.

How durable are Aqualogs?

Aqualogs provide a tougher more durable alternative to coir rolls whilst still using natural fibres. They have a design life of >30 years in the aquatic environment.



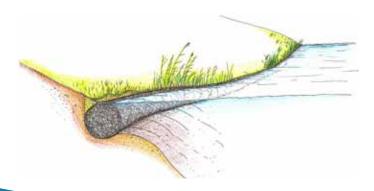
Xylit fibres filter silt, binds nutrients and improves water quality.

Embankment protection for rivers, ponds and lakes

Extreme durability

Aqualog are durable, long term soft engineered bank protection.

The fibre rolls promote sustainable plant growth, retaining sediments and diffusing wave energy to reduce erosion.



How do Aqualogs support thriving ecosystems?

Biochar fibre rolls can be supplied pre-established with mature native wetland plants or left to vegetate naturally.

Xylit fibres have a large surface area, ideal for microbial colonization, increasing its capacity to clean water.

How is water quality improved by Aqualogs?

Aqualogs filter nutrients from surface water, binding them to the fibres to improve water quality and making nutrients available for plants.



Soft bank protection promotes plant establishment.

Silt control and water quality protection

Natural fibre filter

Aqualog provides effective sediment control in areas vulnerable to erosion and water runoff.

The Aqualog intercepts surface water runoff, reducing the speed of flow and trapping sediment as the water filters through the fibre roll.

The natural properties bring long-term silt control, creating surface roughness, breaking sheet flows and encouraging natural colonisation of plants protecting water quality.

