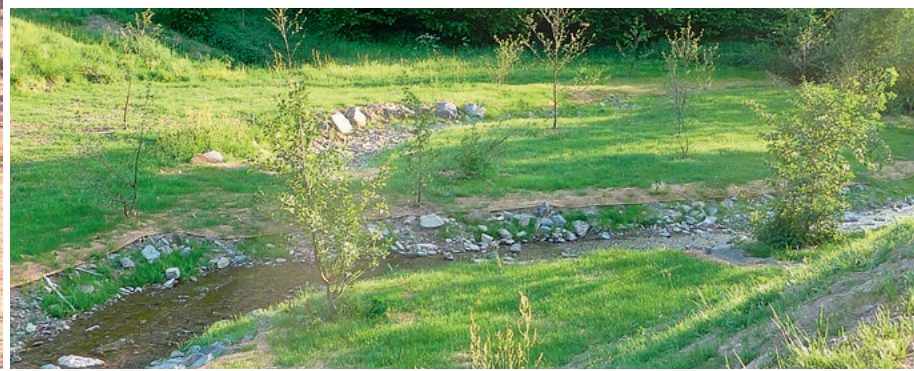


www.igg.de



iggtecx **KGW**

Woven coir geotextiles



Erosion control fabric made of woven coir

Erosion control fabrics from the product group iGGtexc KGW, woven coir geotextiles, often-times are a more suitable alternative to iGGmat erosion control blankets, especially for construction projects on exposed areas at risk from erosion, as well as on shorelines of still waters and streams. A huge advantage is the long lifetime of three to five years due to the high lignin content of the coir fibers. Furthermore it is used if the desired vegetation needs more than one vegetation period to be established. The individual woven fibers slow the water speed of rainfall or of water streams and thus protect the soil surface and young plants. The denser the mesh, and thus denser the woven coir that is used on the soil surface, the greater is the protective effect. We recommend wooden pins or U-shaped fixing pins from the iGGfix product group for fastening iGGtexc KGW.

- iGGtexc KGW is 100 % pure two-ply coir fiber and is not treated with chemicals. This means it is 100% biologically degradable.
- iGGtexc KGW with "Distinction M" has a higher yarn and web quality. The interwoven yarn as well as the warp/weft especially account for the difference between iGGtexc KGW without distinction.
- Three types of weight are available: KGW 400, KGW 700 and KGW 900. The numbers represent the weight per unit area in g/m^2 , which is the result of the thread spacing in warp and weft. The denser the yarn, the heavier the woven fabric.
- In contrast to iGGmat erosion control blankets, iGGtexc KGW have an especially long durability and higher tensile strength.

iggtecx KGW

AREAS OF APPLICATION

Woven coir is used as surface erosion protection for slope and embankment reinforcement in exposed terrain, water engineering and for shoreline stabilization. The selection depends on the slope of the area and the required duration of protection.

Chart 1: Slope and lifetime*

	10°	20°	30°	40°	50°	60°	70°	lifetime**
	1:5,7	1:2,7	1:1,7	1:1,2	1:0,8	1:0,6	1:0,4	
KGW 400								up to 36 month
KGW 700								36 - 60 month
KGW 900								over 60 month

APPLICATION

iggtecx is applied on a prepared surface. The woven coir geotextile must lie completely on the soil with no spaces. The individual strips must be placed perpendicular to the slope of the embankment, next to each other over the entire area. Overlapping on the vertical longitudinal joints should be approx. 10 cm and on the transverse joints approx. 10-20 cm. The open edge of the overlap must be away from the predominant wind direction. Transverse joints must basically overlap from top to bottom. The top and bottom ends of the erosion control mat must be dug into the top and bottom of the slope approx. 10-20 cm deep and fastened. Fastening is done using iGGfix U-shaped wire pins or iGGfix wooden pins.

Chart 2: product specifications*

weight	grade		warp/ weft	thread space	tensile strength MC/CMD	roll dimensions		
	with	without				width	length	m ² /roll
g/m ²				mm	kN/m			
400 M	x		52:48	20-30	13.0 / 12.8	2.40	42.00	100.00
400		x	40:35	20-30	9.9 / 10.0	2.00	50.00	100.00
700 M	x		70:60	10-20	19.2 / 17.3	1.00	25.00	25.00
700 M	x		103:52	7-10	21.2 / 9.4	2.40	42.00	100.00
700		x	60:50	15-20	17.9 / 11.2	2.00	50.00	100.00
900		x	70:60	10-15	19.2 / 17.3	2.00	50.00	100.00
900 M	x		130:52	5-7	30.8 / 12.0	3.00	33.50	100.00

TENDER SPECIFICATION

www.igg.de/en/specifications

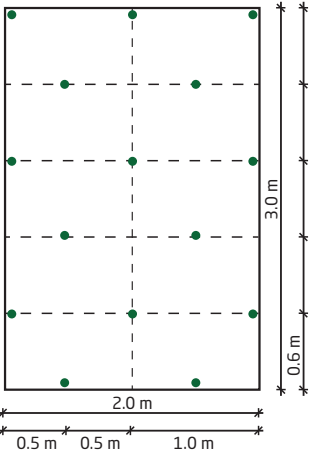
* All given information is based on average values. As coir fabric is a natural fiber, deviations of color, shape, strength, weight and dimensions of the material of up to 10% might occur
Specific lengths and widths on demand

** Depending on various conditions such as general local conditions, ground-, water- and climate conditions as well as of the local risk of erosions.

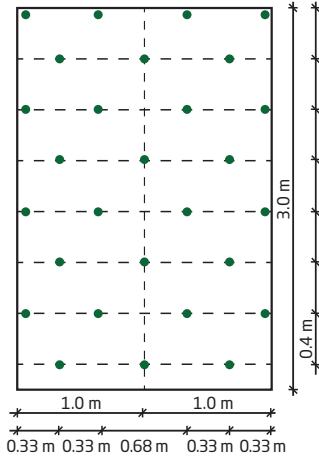
Installation Guide

iGGtec woven geotextiles 2.0 m and 2.4 m

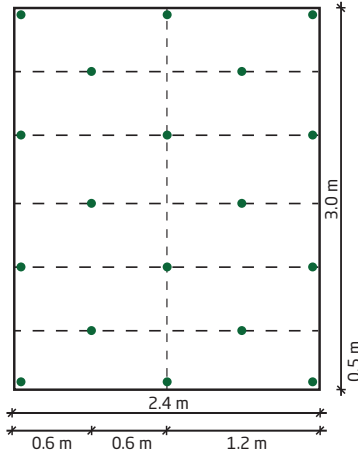
slope <1:1
2-3 pins/m²



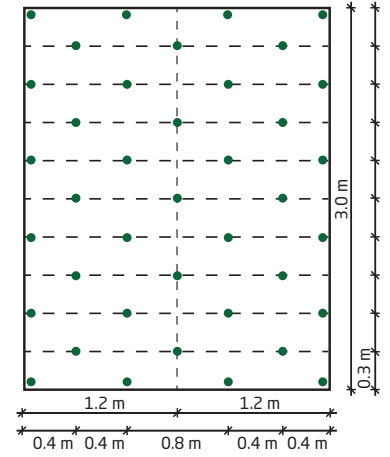
slope ≥1:1
4-6 pins/m²



slope <1:1
2-3 pins/m²



slope ≥1:1
4-6 pins/m²



Secure the blanket on top of the slope by digging one end into the soil

Detailed drawing showing the top of the slope

