

Greenfix compact geojute

The evolution of jute erosion control technology, quicker, more accurate, safer with project cost savings.

Concern for the environment has renewed interest in using natural fibres such as jute, and indeed using jute products can actually reduce the CO2 footprint of a project. Jute is well known and widely advocated for its performance in soil erosion control and has been used successfully for decades. Though effective, the product used over time has not necessarily been designed with the end user in mind. With that in mind we have developed Compact Geojute, which as well meeting and exceeding previous jute performance levels, also caters for the end users of today working in a modern, highly regulated and

competitive environment. The Erosion Control Technology Council (ECTC, www.ectc.org) recognise installation issues as the number one reason for failure to maximise erosion control. The ECTC illustrate that among other site-specific factors, proper anchoring and alignment of geotextiles, whether overlapped or abutted, is crucial to success. So too is the hand rolling of geotextiles for the most intimate soil/geotextile match up.

So how does Compact Geojute help installers and project managers?



Easier to handle and safer for one-man lifting

Each GreenFix Compact Geojute roll covers the same ground area expected (more than 80m²), but by limiting the overall weight of each roll to 25kg (+/-0.5kg), each roll is in-line with the Health & Safety Executive (HSE) guidance for the maximum load for manual lifting by one person. By not exceeding the maximum guidance value individual employees can handle a roll where previously two employees or mechanical lifting aids would be required. A lighter roll also gives the installer more control over its placement, providing a better chance to anchor and align the geotextiles more accurately and they are in a safer position to hand roll the geotextile from below the crest of the slope. This helps boost the potential for full erosion control, and also reduce expensive product wastage for project managers from over-overlapping.



Quicker and cheaper to install

As you would expect, being easier to handle makes the product easier and quicker to lay and makes a more efficient use of manpower. One man can lay the same as two, and two men the same as four. Project managers have the option to optimise the manpower they use on each job and save labour costs, or increase manpower to rapidly increase the speed of installation and shorten the job time to meet tight deadlines.



Easier to transport and store

Each roll takes up significantly less space in warehouses, vans and on-site storage. Here again, GreenFix Compact Geojute can be easily and quickly moved around by a single person.



Higher structural stability

By using a closer and more uniform weave, GreenFix Compact Geojute has a more consistent coverage pattern and is less prone to being distorted or deformed under tensile loading. During anchoring and alignment, this tighter geotextile may reduce distortion around stakes/staples and possibly allow for a reduction in overlap, again saving valuable product wastage for project managers.



Soil erosion performance

Research from the Department of Soil Science at Cranfield University illustrates how a lighter, tighter, more uniform jute weave is capable of providing the high level of erosion control end users have come to expect. Testing shows the compact geotextile to perform equally as well as the conventional 500gsm grade product.



Jute and the environment

Each year Jute crops are sustainably managed and from seeding to harvest, one hectare absorbs as much as 15 tonnes of CO₂. Because GreenFix Compact Geojute is made of 100% jute, the CO₂ footprint of a project can be reduced by more than 2kg CO₂ for every m² installed.

*[International Jute Study Group, IJSG 2009]. **[Fair-Source, data recorded at production site; and DEFRA, Guidelines to Defra's GHG conversion factors for company reporting, 2009]. ***[Maersk, Reducing greenhouse gas emissions, 2009].

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Technical Specification

Fabric Type	Flat fabric mesh made of jute with woven yarn
Durability	1-2 Years
Weight	305 g/m²
Packaged	Rolls
Width	1,22 m
Length	68.58 m
Area	83.67m
Weight/Roll	25kg (+/-0.5kg)
Ends per 10cm	11 THREAD
Picks per 10cm	10 THREAD
Dry thread tensile strength in ends direction*	150-200 Max Force Newtons
Wet thread tensile strength in ends direction*	90-150 Max Force Newtons
Mesh Size	Approx' 9mm x 10mm
Open area	40-46%
Absorption of water in % of dry weight	500-595%

(warp and weft) BS EN 13934-1:1999 *

The specifications presented herein are to the best of our knowledge true and accurate. GREENFIX cannot guarantee or warranty our products, unless agreed to in writing for specific conditions, for performance since the manner of handling, use and installation are beyond our control.

We cannot warrant our products to perform under unlimited circumstances due variables such as soil conditions, manner of installation and particularly severe weather conditions. Satisfactory results may not meet your expectations. No one can guarantee that required moisture will occur to permit growth after seed germination. We will not be liable for damages or losses, direct or indirect, of our GREENFIX Range of Products due to the above reasons.