

## greenscreen and the environment

the most  
natural looking  
fencing  
and noise  
prevention  
solution  
available

Greenscreen scores on two fronts with regard to the environment. Firstly, as it is designed as a climbing plant support, it quickly becomes totally clad in foliage appearing as a green 'hedge' and offers the most natural looking fencing and noise prevention solution available. Secondly, as befits a truly 'green' product, greenscreen is a champion of both ethical and environmental causes.

A modular product, the screen sections comprise special 'micro mosspoles' held securely in galvanised steel frames which are manufactured close to the Dutch assembly facility. The poles are the heart of the system and are at least 80% constructed from recycled ABS plastic - predominantly mobile phone casings and yoghurt containers sourced locally in Holland. This material is reformed into plastic tubes via extrusion equipment within the assembly facility and then automatically wrapped with coco-fibres by a specially developed machine in the same location. The coco-poles are then fitted into the high quality galvanised steel framework

The coco-fibres are sourced from traditional coconut plantations in a sustainable and responsible manner. The manufacturer in the Netherlands has over the last 10 years developed a close relationship with its raw material supplier, consequently benefiting the local rural community. The raw materials are imported under stringent controls and tested regularly to meet EU regulations on saline content.



Left to right

1. The soaking-process on the mill
2. An open coconut
3. Combing the outer husks
4. Separating the coco peat from the fibres
5. The coco fibre is thrown in the air to remove the peat
6. Pressing the bale
7. A 125 kg coco fibre bale
8. Kokowall Noise Barrier height: 2 metres - covered with *Hedera hibernica* (Irish Ivy)

All material components of the screen have an exceedingly long life expectancy however, if ever required, all elements of greenscreen can be fully recycled again. In the past and even on current projects clients have requested upgrading of the barriers' specifications. In these instances the screens are returned to the factory where they are stripped down and components are then either recycled or reused for the new order. Any coco-fibres that are not used for the screens are passed on to a producer of specialist plant-growing composts.

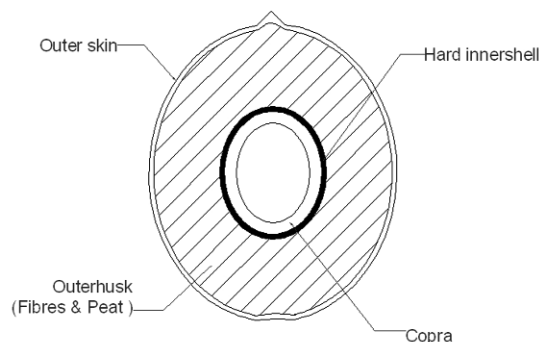
As the screens will primarily be used in place of either concrete or wooden structures, the fact that greenscreen is designed for plants, gives an important extra boost to local wildlife. A mature screen is approaching a hedge in terms of a wildlife haven, providing insects and birdlife with ideal additional living environment.

# greenscreen and the environment

## what is kokos

### Extracting Coco Fibres

Coco fibres derive from the shell of the coconut: a natural product. Coco fibres' durability can be compared to that of tropical hardwood. It is a tough material that for centuries has been used in the production of mooring ropes and doormats. Because coco fibres absorb little water, the fibres will not show any signs of decay. Mould or moss therefore will not have the chance to develop.



*Cross-section of a coconut.  
The shaded section indicates where  
the coco fibres are located.*

Kokosystems uses coco fibre products from Sri Lanka. Said products undergo frequent quality control sessions ensuring an EU stipulated salt level not exceeding 0.5Ms/cm.

### The Soaking Process

After the coconuts have been collected from the trees, the nuts will be stripped of their outer husk, thereby extracting the fibrous material. The copra and the pulp are housed in the hard inner nut. The outer husk of the coconut is soaked in water for six months. This allows for easier "combing" later.

### Combing the Fibrous Material

When the husks have been soaked long enough, the fibres will be "combed" in the contraption seen below. The machine contains large revolving drums with planks that have nails attached to it. The drums rotate at a high speed loosening the fibres by pressing the husk against the drums' walls. The thick Bristle fibres - the husk's main fibres - are the result of this process.

Lodged between the Bristle fibres are the so-called Mattress fibres. These fibres are somewhat shorter and more elastic. Said Mattress fibres appear at the back of the revolving drums and are used for the production of coco poles. Mattress fibres are also used in the production for mattresses and car seats.

### Combing the outer husks

The combed fibres are led through a revolving gauze drum. This particular drum extracts the coco peat, which is used by professional growers as a seed-starting product. The clean fibres are subsequently bundled into small, loose parcels and transported from the mill to coco fibre suppliers.

### Separating the coco peat from the fibres

After having reached our supplier, the fibre bundles will be shaken once more so that the last amounts of coco peat are extracted. Subsequently, the fibres are pressed into tight bales weighing in at 125 kilograms each.

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Knaphill Nursery  
Barrs Lane, Knaphill  
Woking GU21 2JW  
t: 01483 485800  
f: 01483 485801  
e: info@clarkeandspears.co.uk  
w: www.csi.eu.com  
www.thegreenscreen.co.uk