NATURAL TIMBER NATURALLY TREATED

INNOVATION ENHANCES THE EXISTING QUALITIES AND PROPERTIES OF SOFTWOOD



INTRODUCTION

Of all the materials that the architecture and design community work with, timber is often controversial in terms of sustainability. Environmentally improved products that are not fit for purpose or lack practical value are not sustainable or desirable; they are merely opportunistic marketing illusions. However, numerous advances in research and development, standards and certifications have offered the industry superior products that address aesthetics, performance and sustainability.



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A noteworthy Norwegian company and its products stand out on multiple fronts when it comes to timber sustainability. Kebony is an Oslo-based business with subsidiaries, agents and distribution networks worldwide. In Australasia, Woodos distributes Kebony, and has showrooms in Sydney, Melbourne and Singapore.

So what is the company's claim to being greener, healthier, smarter and socially connected to their customers and communities?

In summary, it takes FSC and PEFC certified softwood, and applies a bio-based treatment process, which enhances and strengthens the existing natural qualities of the timber. The result is Kebony timber; a product that has enhanced properties for internal and external applications without the need for additional chemical-based oiling, stains or coatings. It also does not require onerous maintenance or cleaning agents to maintain and prolong its durability.

Woodos Managing Director, Mike Milling, has three key messages for designers and specifiers:

1. Kebony is the only sustainable alternative to tropical hardwood when beauty and performance are essential.

- The Kebony technology modifies the wood's cell structure with a bio-based liquid; sustainable softwoods adopt the performance and aesthetics of the best tropical hardwood.
- Kebony is durable, natural, and sustainable. It is suitable for interior and exterior applications, which demand high performance woods.

Sun and rain is no enemy to Kebony. The company's claim that natural weathering further adds to Kebony's appearance is especially positive and highlights the value of how a product's 'ageing' can enhance a material without the application of artificial chemicals.

Kebony have taken a sustainably grown material, and further magnified its credentials through patented treatment methods:

"The Kebony® technology modifies wood by forming stable, locked-in furan polymers in the wood cell walls. These increase the dimensional stability, as well as durability and hardness, of the wood. The process is based on impregnation with furfuryl alcohol, which is produced from agricultural crop waste. Kebony thus uses a plant-derived waste product to give enhanced strength and durability to another plant product – namely wood."

The ability to take sustainably grown softwood and run it through the Kebony process to create a high-quality product, with the properties of hardwood, is both innovative and transformative.

Furthermore, Kebony claims a diverse range of benefits and features all wrapped up in the product and its method of treatment:

- Natural timber with enhanced and strengthened cell structure
- Hardness level increased to levels of the best hardwoods
- Superior stability with swelling and shrinkage reduced by 40-60%
- Long life outdoor life time warranty for 30 years
- Low maintenance with no additional treatment needed other than normal cleaning
- High resistance against fungi, rot and other wood destroying micro-organisms
- No toxic substances used in the impregnation, curing or drying process
- Crop-waste derived bio-based liquid used for Kebony technology
- Sustainable sources of softwood from sustainably certified managed forests

Kebony is a notable company and product. It demonstrates a sophisticated approach to sustainability that is coherent and holistic. It is much more than just 'green'. It embodies a proactive view of how its products and processes can positively affect people, planet and profit.

Kebony does not declare its corporate social responsibility or product credentials lightly. The company participates in highly regarded programmes as well as subjecting its products to numerous third-party assessed eco-labels and certification schemes. This includes having all Kebony products certified by the Nordic Swan Eco-Label, and supporting the United Nations Global Compact – a principle-based framework for businesses in the areas of human rights, labour, environment and anticorruption. According to Milling:

"Kebony is new to Australia and people don't know about it yet. Right now, we are in a stage of getting the name out there and educating people about Kebony's sustainability."

Much more can be written about Kebony's products, processes and people as it is clear that extensive research, design and development rest at the core of the company. It lives and breathes the philosophy of a business seeking to create value-added products, which are produced responsibly and driven by real-world innovation.





