

Modified softwood licensing opportunity



Sustainable, high-value wood products offering an alternative to tropical hardwoods can be produced from radiata pine using Scion's patent-pending wood modification technology.

Why modified softwood

Radiata pine for modification is sourced from sustainably managed (FSC-certified) New Zealand planted forests.

Modified softwood is an eco-friendly alternative to tropical hardwood, with durability, stability and aesthetic appeal, but without the further deforestation of the world's tropical forests.

Sustainable modified softwood meets growing demands for green design and materials, and high performance, low maintenance products.

Made using bio-based materials, unlike traditional heavy metal preservation technologies, market access is maintained and total life cycle and environmental impacts are reduced.

Modified radiata pine characteristics

Modified softwood is prepared from sustainably sourced New Zealand radiata pine using a bio-based liquid treatment. It is free from heavy metals and does not require special disposal measures.

- Improved dimensional stability
- High resistance to fungi and rot
- Weather resistant
- Low maintenance
- Increased density
- Machinable

Available in a range of colours

Scion's technology is unique in that products can be produced in a wide range of colours while maintaining good durability and stability:

- **Dark** – a rich chocolate brown
- **Light** – delicate caramel colours that can be customised
- **Neutral** – a range of light hues that can be coloured

Modified softwood applications

Use where improved durability, stability and appearance are important, e.g. above ground outdoor applications such as cladding, decking, window and door joinery and furniture.

What is modified softwood?

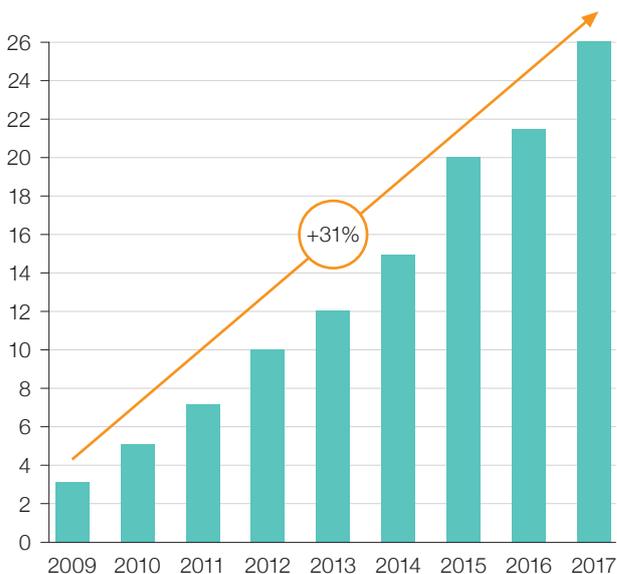
Modified softwood is treated to enhance its performance. The treatment can be chemical, biological or physical. When modified, lower value, sustainably grown softwood species take on characteristics of higher value woods such as tropical hardwoods.

Scion's modified softwood is impregnated with bio-based furfuryl alcohol. On heating, a polymerisation reaction occurs, permanently modifying the wood. The process can be customised to produce a range of colours and is subject to patent application.

An established and expanding market

The modified wood market is attractive and expanding rapidly. European manufacturers Accoya® and Kebony® have developed the market and both companies have recently

doubled their production capacity. Worldwide demand for modified wood could be as much as 1-2 million cubic metres.



Kebony® revenue development (€ million).

In New Zealand, there is the potential to develop a NZ\$30 million, 10,000 cubic metre market at Year Five.

Licensing opportunities

Worldwide licensing opportunities are available.

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About Scion

Scion is the Crown research institute that specialises in research, science and technology development for forestry, wood and wood-derived materials, and other bio-material sectors.

Scion's purpose is to create economic value across the entire forestry value chain, and contribute to beneficial environmental and social outcomes for New Zealand.



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