

SIRIM Bio-composite Flooring and Decking Material

Protecting the planet, one building at a time

From the rooftops of renowned hotels and neo-modern skyscrapers to the decks of meditation retreats, today's designs often utilise natural aesthetics through wooden surfaces and textures. But with the emerging consciousness of our impact on the environment, the challenge lies in bringing a natural touch to these edifices in a sustainable fashion.

Wood Polymer Composite (WPC), is emerging as a common substitute for real timber in creating upmarket furniture, support and flooring. The composite, which uses sawdust and wood chips mixed with plastic feedstock, offers the look and feel of wood, but with a lower impact on forests and greater resistance against weather, termites and rot.



A Malaysian solution

SIRIM offers a particularly suitable – and uniquely Malaysian – alternative.

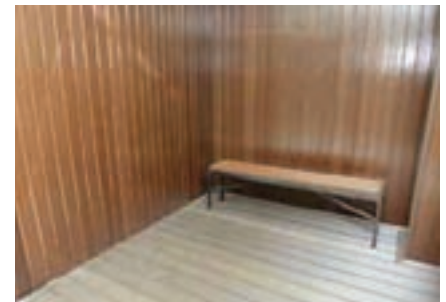
Its bio-composite has all the advantages of WPC, while also making use of an abundant local source of organic waste.

In addition to sawdust and wood chips, the solution uses paddy stalks and rice husks collected after harvesting rice grains. This forms the organic base that is blended with the polymer pellets to form the bio-composite. The organic fibre makes up nearly two-thirds of the composite, while the polymer ingredient is sourced from recycled plastics.

Green function, green value

The bio-composite can be produced in a wide range of shapes and used in many different types of projects without losing its dimensional integrity. Because of its composition, the material does not require any additional protective coating and is inherently non-toxic and low-maintenance. Compared with untreated wood, it is not easily susceptible to rot, and is highly resistant to water, fire, termites and fungus.

SIRIM's bio-composite decking material promises zero reliance on the wood derived from logging, while also providing the look of a natural surface for attractive decking and flooring.



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