

A Question & Answer on Sioo with the wood scientist Prof. Callum Hill

What is it that makes Sioo products so good, as you see it compared to other products?

Sioo is a unique surface protection system that uses the chemistry of silicon to protect the wood. This chemistry is used (in different ways) in both the penetrating and the surface protector. Both of these penetrate the wood rather than forming a coating. The protection arises from the inertness of the silicon-oxygen bond and because the system does not rely on a coating for the protection. Clear coatings on wood fail because lignin of the underlying wood is degraded by UV light and this leads to a loss of adhesion between the coating and the wood. This cannot happen with the Sioo system because it polymerises within the wood matrix, which bonds the wood cell walls together even after the lignin has been degraded.

What is it in the formula that makes it so special?

The patented combination of silicon chemistry in both the penetrating system and the surface protector is a crucial piece of technology. The surface protector prevents the leaching out of the penetrating system during the curing stage. Furthermore the surface protector uses a combination of silanes in a balanced formulation, which gives a targeted flexibility, allowing it to move with the wood, as well as presenting a water repellent exterior.

Could you really trust a product that is only based on minerals, plants and water?

Yes. The product relies upon the inertness of the silicon oxygen bond for its performance. The combination of ingredients, plus the water-based formulation ensure that the product has a very low environmental impact. Also the product is non-toxic in service and can be disposed of by incineration with energy recovery at end of service life, the silica remains behind as inert ash.