

## Frequently Asked Questions

### 1. What is Resysta made from?

Resysta is a patented composite material, made from approximately 60% rice husks (hulls), 22% salt, 18% mineral oil. It looks and feels like hard wood, but does not have the problems commonly associated with wood, like rotting, greying, cracking, splintering and etc.

### 2. Who is Oko-Haus Pte Ltd?

Okohaus Pte Ltd is an authorised supplier and installer of Resysta products for Singapore, working closely with Resysta Asia, we are committed to Resysta's quality and high standards

### 3. What makes Resysta different to other Wood Plastic Composites ("WPCs") in the market?

There are many types of WPCs available of varying quality. However Resysta is unique, no wood is used in its manufacture. Common WPCs use wood in their mix and will most likely suffer from the effects of the wood content. Since this wood absorbs and dispels moisture, it creates pockets within the vinyl. Over time black mould can appear and never subside. Cleaners may make it look fine for a few days—but it will always come back. Greying, cracking, warping and rough surfaces can happen with other WPCs. Additionally common plastic woods normally use a high degree of Polyethylene mix, giving the product a synthetic look and feel. Resysta does not have any of these problems.

### 4. Is Resysta expensive?

- a) For what you are getting, it's not expensive. Even though the main ingredient is rice husks, it is not just a matter of getting tons and tons of rice husks and throwing them into a blender. The husk quality and colour is painstakingly sorted to ensure that it is suitable for the manufacturing process. For decades, engineers have tried but fail to combine rice husks with polymers. Using a complex procedure (PTRH-Technology), Resysta is able to treat the rice husk to enable this marriage, providing Resysta with its unique properties.
- b) While Resysta is marginally pricier than natural hard wood (Chengal, Teak, Iron wood and etc) and priced in line with higher quality WPCs. At Okohaus, we insist on using Resysta runners, structural frames (unless additional structural support is required) and genuine Resysta accessories like clips, dowels, end caps and stainless steel screws. From our experience, while cracking and greying wood planks is unsightly, the real danger lurks beneath. Untreated and lower quality out door wood is typically used for structural frames and runners for hard wood and WPCs planks. Invisible to the naked eye, over time the moisture and the high humidity in Singapore may damage the supporting wood and turning your deck into a potential hazard.
- c) If you consider the technology and quality of Resysta, its durability, it is in fact a great value for money

## **5. Will Resysta fade?**

No material, natural or man-made is impervious to the elements and Resysta is no different. However, an independent Xenon test proves that Resysta is more durable than wood and WPC in general, to the effects of harmful UV rays. A copy of the test is available on our website.

Resysta's beauty and longevity can be further enhanced with water-based stains and 2K coats, developed especially for Resysta.

## **6. How stable is Resysta?**

It is completely stable, one of the truly unique features of Resysta, is that it is totally inert. It will not swell, crack or splinter. You can even throw it into a bucket of seawater for a year and no change will happen.

## **7. Can I work it like wood?**

Yes, exactly like wood. You can cut, mitre, grout, drill, sand, file, oil and varnish Resysta with normal wood-work tools

## **8. Can I use glue on Resysta?**

Yes, just like wood but we suggest using a one component polyurethane adhesive for best results.

## **9. What sizes of Resysta decking are available?**

Resysta is available in a few different sizes and profiles. They come in 125mm, 140mm and 190mm widths and different thickness. Please contact us for more details.

## **10. How long will Resysta last and what are the guarantees?**

Resysta offers a 15 years warranty subject to terms, conditions and adherence to the installation guidelines. This warranty applies to the Resysta material and it shall not crack, splinter, swell, rot or suffer structural damage from termites or fungal decay. However as it is a composite material it could easily last 30 years or more. A copy of the guarantee is available on Resysta website ([www.resysta.com](http://www.resysta.com)).

## **11. Do I need to maintain it?**

- a) Everything, especially outdoors needs cleaning and maintenance. Even your windows need regular cleaning. The better you care for a product the better it will last. We suggest you sweep and wash your Resysta decking whenever there is a build up of dirt.
- b) The surface maintenance will vary according to the supplier specifications, where the deck is positioned and the amount of wear and tear to which the deck is subjected.

**12. Does Resysta stain, and if so, how do I remove the stains?**

While Resysta is resistant to staining, it may still be stained by prolonged exposure to contaminants like Red wine, coffee, cooking fat and oil. Unlike wood and WPCs, which is difficult and impossible to re-condition on respectively, a light sanding is able remove most stain.

We always recommend using a surface protector. For a slight additional cost, we can apply a layer of 2K protective coating for additional protection.

**13. Is Resysta slip resistant?**

Yes, it is very slip resistant. Please refer to the technical specification of Resysta.

**14. Can you recycle it?**

Absolutely, you can return it to us and we will return it to the manufacturer for recycling. Please note that we may require to charge for transportation.

**15. Does it have a green rating?**

Yes, It has obtained Green Label status in Singapore, made from more than 50% recycled material.

Certificate number: **043-012**

Prof. Dr. Karl Stetter of the University of Rosenheim (Plastic University) says in his official evaluation of Resysta,

*“For the named applications, Resysta provides perfect preconditions owing to its exceptional tensile and impact strength, resistance to temperature, humidity, sun, and insects and in its generally substantial inert composition. Unlike wood, Resysta is swell, splinter and crack-free, does not grey or fade and is resistant to fungal decay. Products made of Resysta are therefore very durable without requiring special care and maintenance. This material is a real alternative to tropical wood. Furthermore products made of Resysta have an especially beneficial eco-balance and bear positive hygienic properties”.*

**16. So how eco-friendly is Resysta Wood?**

What you really need to understand is how the rain forests of the world, in South East Asia, South America and Africa are being destroyed for the supply of tropical hardwoods. And a lot of this is used for furniture and decking. As the forests are destroyed the quality of the hardwoods like Balau and Teak get worse and the prices get higher. Try it for yourself and you can be assured that if the quality of hardwood is anywhere near decent it probably comes from an illegal source. It's actually criminal what goes in the rain forests and one of the best solutions is Resysta. A product that looks and feels like tropical hardwood, has none of the weathering problems and uses bio-waste as its raw material. **Think about it?**

#### **17. What official tests have been done on Resysta?**

To make sure Resysta meets all its promises, many tests have been done on Resysta. These include comprehensive tests by TUV (Technischer Überwachungs-Verein), Bureau Veritas, DIN and ASTM International. A summary of the tests can be found on our website.

#### **18. What different colours/shades are available now?**

We offer Resysta in Burmese Teak (natural colour), Aged, Burma, Walnut and Siam. Other colours are available on a special indent basis.

#### **19. Can Resysta break and can items be repaired?**

Yes, under severe strain or abuse Resysta can break and the decking planks can be replaced.

#### **20. Has the product been patented?**

Yes, it is a patented product.

#### **21. How long has it taken to develop?**

Experiments with the first basic composition, using bio-waste and rice husks (hulls) started in 1996.

#### **22. Is Resysta fire proof?**

Unlike most polymer based wood composites, Resysta will not burn like a candle. It has been extensively tested and the results are as follows:

a) DIN 4102-1 (May 1998) Flammability (Building Material Class B1)	Class B1
b) DIN EN 1350-1 : 2007 Fire classification of construction products and building elements - Part 1	Class E
c) ASTM E84-09 Surface Burning Characteristic of Building Materials	Class A
d) BS 476 Part 6:1989+A1: 2009 - Fire Propagation Test	
Sub Index1	1.01
Sub Index2	0.89
Sub Index3	0.47
Fire Propagation Index I	2.37
BS 476 Part 7:1997 - Fire Classification	Class 1
Building Regulation 2006 Approved Document B, UK Requirements : Propagation Index I < 12	Class 0
Sub Index < 6	

**23. Will it get hot in the sun?**

Yes, Resysta does get hot in the sun in a similar way to tropical hardwoods. As with wood, lighter stains will be significantly cooler than darker tones.

**24. Is it safe for pets/children to chew or lick?**

Yes it is perfectly safe and already meets 2014 European standards. Resysta is toxin free.

Source: Resysta and Okohaus Pte Ltd