



Some miracles happen, some are invented.

Resysta Concept Presentation



▶ Replace the use of tropical and chemical treated wood with Resysta







Wood has a lot of disadvantages in nearly all aspects



Wood:

- Splinters and cracks
- Does not maintain original colour, greys over time
- Natural cell structure (lignin) results in water absorption
- Moisture results in deformation
- Rots and is prone to fungal decay
- Is time consuming and expensive to maintain
- Not a sustainable resource, especially tropical hardwood











We solve this problem with Resysta









- Basic ingredient of Resysta is High Concentrated Nature Silica
- Nature Silica can be extracted from plant fiber

What is Resysta?



More than 100,000,000 metric tons of rice hulls (or "husks") are generated each year throughout the world¹:



1. See Velupillai, L., Mahin, D.B., Warshaw, J.W., and Wailes, E.J. 1996. A Study of the Market for Rice Husk-to-Energy Systems and Equipment p. 15.



Rice husks

Salt

Oil

+ plus 14 further high-quality additives

= secret Resysta formula

Secret formula is protected through IP and know-how



Patents

- Patent application on formulation submitted in January 2010
- Patent attorney Heisse Kursawe Eversheds (Germany) positively analyzed the patent situation: "Resysta will pass the patent process with high probability"
- Coller IP (UK) also analysed the freedom to operate and patent space: result was low risk of patent infringement
- Patent approved for Singapore, Japan and United State as of 2014, EU in 2015 and many countries will follows

Most importantly Resysta has been extensively tested and has been proven in the field for over a decade, a strong barrier to entry for potential competitors



Some miracles happen... some are invented

The key of the Resysta invention is the "marriage" process between the natural fiber and the polymer:

- A complex procedure (PTRH-Technology) enables us to treat the rice husk so that this marriage process can take place providing Resysta with its unique properties.
 (Since the 60's Japanese companies tried to mix rice husk and polymer but never came up with a sellable product)
- Resysta is a unique material with polar properties

How is Resysta produced?



Compound



Extrusion / Injection process



Profiles



Boards / Sheets





What makes Resysta unique and superior?



- Looks and feels like high quality wood
- Water resistant
- Exceeds many times the wood lifetime
- Workable like wood and even more possibilities
- 100% recyclable
- Sustainable raw material
- Price is lower than hard wood
- High UV resistance





One material – any colour you like



Resysta Colour Concept – Resysta can be stained in any colour





Resysta can be easily extruded into a large variety of products



Applications of Resysta are

- Decking
- Siding
- Wall cladding
- Windows
- Panelling
- Waterproof flooring
- Outdoor furniture
- Marine applications (interior, exterior)
- Shutters
- Fencing
- Railings
- Doors
- Sandwich boards
- And many more possibilities















Furniture MBM Germany







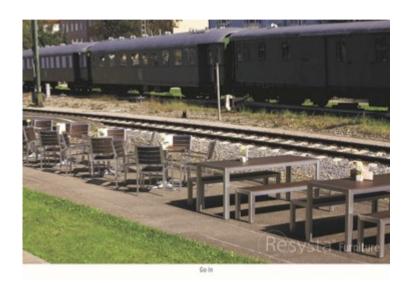






Furniture GO IN Germany









Furniture SATELLIET









Furniture Summer Classics







Resysta Bathroom







REINA EX - Vanity Counter Set, 2-Levels ZEN871 - Countertop Washbasin 650 x 370 x 150 mm

BBR102 - Wall-mounted Vanity Counter 2-Levels 1200 x 500 x 550 mm

WT002.1 - Wall-mounted Tray 600 x 200 x 70 mm

Finished projects around the world Nazareth, Israel 2011







Finished projects around the world Berlin, Germany 2010



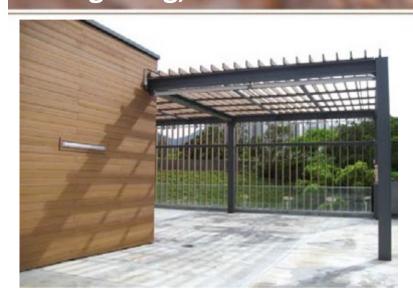






Finished projects around the world Hong Kong, 2006











Finished projects around the world Hoh Chi Minh, Vietnam 2011







Finished projects around the world Miami, USA 2011













Resysta Warine Deck, USA, 2011



Finished projects around the world Meran, Italy 2012





Quellenhof****-Meran, South Tyrol

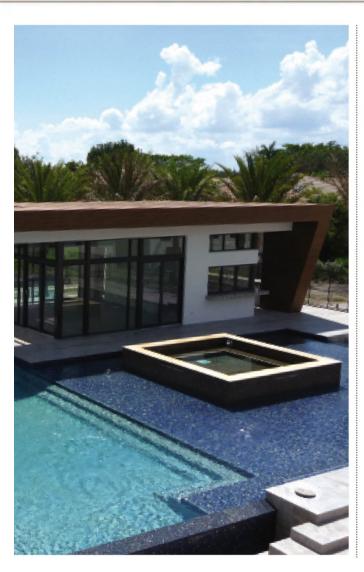




material used: RESYSTA DKG 12522 amount in square meters: 1200 color shade: FVG C24 year of construction: 2010 climate: alpine

Finished projects around the world Weston, USA 2011





Private Villa – Weston, Florida



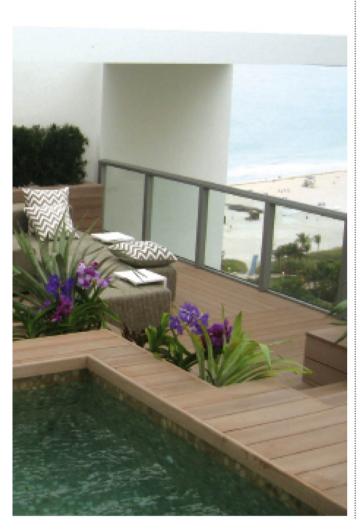




material used: RESYSTA DKG 12522 amount in square meters: 260 color shade: FVG CO8 year of construction: 2011 climate: tropical moist

Finished projects around the world Miami, USA 2010





Penthouse – Miami Beach, Florida







material used: RESYSTA DGK 12522, RESYSTA FPS 7020, RESYSTA RUH 7038

amount in square meters: 110

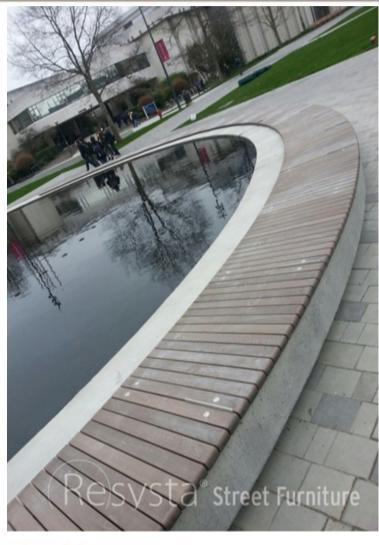
color shade: Resysta untreated with 2K sealer

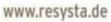
year of construction: 2010

climate: tropical moist

Finished projects around the world University of British Columbia, Canada











Current projects Bridge Middle East, 2013





Bridge Middle East

amount in square meters: 6.000



Current projects Bridge in Iran, 2014













American School - Greece



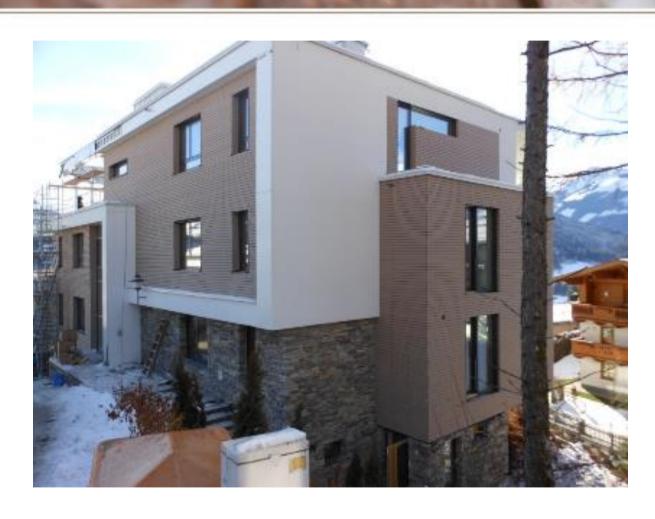




www.resysta.de

Current projects Kitzbühel, Austria, 2011





Current projects Igersheim, Germany, 2013





Facade project Wittenstein, Germany amount in square meters: 1500



Current projects Chick-fil-A, USA











Current projects Starbucks Coffee, USA











Star Bucks, Manhattan, USA, 2013



Star Bucks, Chicago, USA, 2012

Especially beneficial eco-balance



»Resysta ist extremely resistent and provides for an especially beneficial eco-balance«

Technical and ecological assessment of the new material Resysta.

Resysta looks like wood and offers high mechanical strength, thermal stability as well as chemical resistance. Unlike wood, Resysta is swell-, splinter- and crack-free, does not grey or fade and withstands 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.

Owing to these characteristics, Resysta is especially suitable for outdoor use, e.g. it can be worked for garden furniture, outdoor flooring, as well as wellness and pool areas. Simply everywhere, high strain and aggressive weather and environmental influences become effective.

Furthermore, products made of Resysta provide for an **especially beneficial eco-balance**. In terms of hygiene, Resysta also offer superior characteristics, as it is not harmful to health and does not emit noxious substances into its surroundings. Like most synthetic materials, the polymeric material part of Resysta is made of petroleum. Therefore, only a minute quantity of crude oil is necessary. Both components of Resysta, the polymeric material as well as the reinforcing fibre, are **100% recyclable**, as the thermoplastic material can be transformed into other products as necessary. These results show that relatively, Resysta provides for an **especially beneficial eco-balance**, which is further enhanced by its durability, **low maintenance** and the absence of insecticidal and fungicidal preservatives. In short: **Resysta deserves the title »The better wood.**«

Prof. Dr. Karl Stetter Chemist with diploma Specialist in varnishes, surface coating compositions, wood preservation, adhesives and their effect on the environment as well as interior harmful substances: Officially appointed and authenticated by the Chamber of Commerce and Industry for Munich and Upper

Bavaria

Professor Dr Statter

Resysta material was comprehensively tested by leading institutes



Resysta was tested in accordance to German, British and European Standards at renowned institutes such as















Many awards confirm revolutionary properties (examples)





 red dot award 2012: Resysta Marine awarded with one of the most important prizes worldwide in the category "product design"



 DETAIL 2011 - renowned architectural magazine: winner of the product competition in the construction material category



 Dwell 2011 – large design show: Dwell on Design Award for excellence in the category "Design material"



 AIT 2011 - renowned architectural magazine: Award in the category "Sustainability"

Many awards confirm revolutionary properties (examples)





 agraME (Middle East) Award 2014: winner in the category Best New Product for Gulf Market- Landscaping



Financial Times 2013: winner in the category
 "Sustainable Investment of the Year"



MaterialPREIS 2013: winner in the category "Innovation" materials

Resysta is LEED qualified (Leadership in Energy and Environmental Design)



RESYSTA can contribute points as follows:

Materials & Resources

MR Credit 6 "Rapidly Renewable Materials" – Up to 1 point

*MR 5 (based on project location and production location) – Up to 2 points

Indoor Environmental Quality

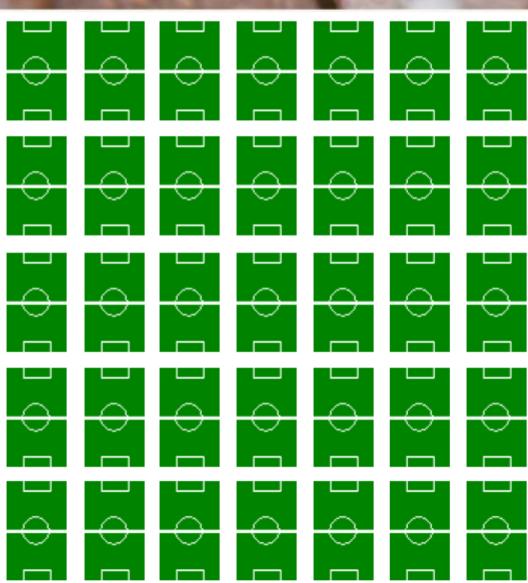
EQ Credit 4.2 "Low-Emitting Materials: Paints & Coatings" – Up to 1 Point

Innovation & Design Process

ID Credit 1- "Innovation in Design" - Up to 1 Point

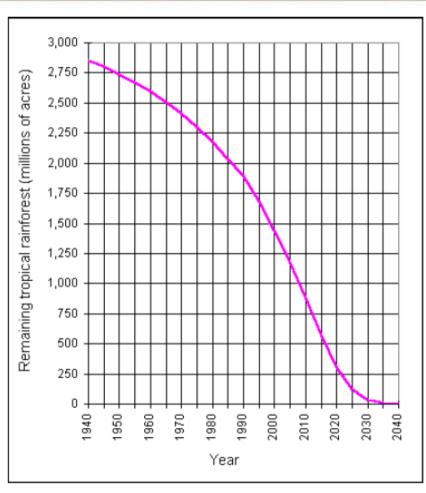
Every minute an area of 35 soccer fields of Tropical Rainforest is lost forever!





Rainforest of the world





- 1960: 2,600 million acres ¹ of tropical wood – now only 500 million acres left
- Demand is increasing by 11% per year

Source: www.tropicaltreefarms.com

¹ 1 acre= 0.404 hektar

Increasing demand for wood



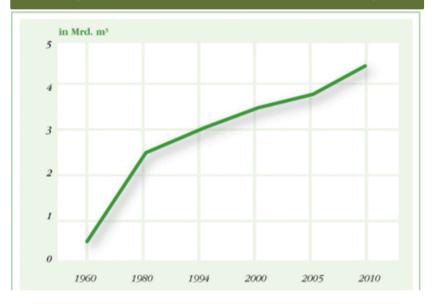
Historical demand for wood:

1960: 1,5 billion m³; 2010: 4,5 billion m³

This amount equals a fully loaded train with a length of 40 times the circumference of the earth and a turnover wide over 500 billion USD

- •The demand for wood will steadily increase with the increase of the world population
- •Only in Europe in 2030, the demand of wood will be over 400 million m³ more than the actual availability¹
- The wood price will increase rapidly

Development of the worldwide wood consumption



Source: www.lifeforestry.com

¹ Source: www.lifeforestry.com

Customer portfolio to join the Resysta network



The polymer industry is fascinated and is prepared to join the Resysta business:

- Participate in the world market of 500 billion USD
- Produce a green product which provides the end consumer with the better wood

Key Partners:

Compounder worldwide











Resysta by

INEOS Compounds







Worldwide presence of the Resysta organization





Resysta Network for Growth









INEOS Compounds





KraussMaffei]



- Network has been approved on January 8 2015 by SE, under Anti Trust rules by CEFIC
- "Network For Growth" will invite as a principle all companies that have concluded a compounder/converter / collaboration contract with Resysta International or its affiliates.
- Downstream value chain partners (distribution, specifies, builders, installers) the group concluded that they should be rather invited to meetings and conferences as speakers and considered guests
- create a platform for members to share information (network vision, who is who, special marketing tools, brand new projects completed, success stories, presentations of the members with links)
 - Round table session
 - Marketing and Communication
- Controlled loop for Resysta
- Establishing ONE STANDARD material with closed loop recycling concept

Meanwhile more than 1000 soccer fields of tropical rainforest are lost forever!







% The Future is made of $Resysta\ensuremath{\text{w}}$

100% no wood • 100% no WPC • 100% waterproof