100 %
NO WOOD
WATERPROOF
NO WPC
100 %

Your advantages

100% WATER-RESISTANT

UV-RESISTANT

100 % RECYCABLE

SUITABLE FOR EXTRUSION

CONSISTENT HIGH QUALITY

RESYSTA: UNIQUE MATERIAL WITH BIPOLAR PROPERTIES

A complex procedure (PTRH-Technology) enables us to treat the rice husk in a way that - for the first time - provides for a process taking place between a natural fiber and a polymer. This allows for the rice husk to entirely combine with the polymer. Therefore the positive properties of the silicates, contained in the rice husk are reflected in the compound. Owing to the bipolarity of the material, its surface cross-links with water but water cannot penetrate it. Furthermore, Resysta is easy to shred and pulverize for the recycling process and can be introduced to production without an intermediate step.

RESYSTA WORLDWIDE

We provide an entirely new material standard, which is instantly available around the globe and which can expand your product portfolio considerably. You furthermore benefit from our many years of experience and will receive extensive support.

RESYSTA

We have created a material that can replace precious raw material wood in many sectors and therefore preserve this resource. Resysta is available as powder or pellets. The extrusion of solid and hollow profiles as well as boards of various wall thicknesses is possible with Resysta. For the self-compounding of Resysta, we provide the active filler (ARF).

15 YEARS GUARANTEE

- no swelling
- no cracking
- no splintering
- no rotting

Resysta®
THE BETTER WOOD

Resysta – one material, endless possibilities

window | façade | wall-cladding | decking | marine decking | interior design

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Resysta®
THE BETTER WOOD

Powder reinvented

A natural fiber compound ahead of its time

Resysta – a gift of nature

Our aim was to develop a weather- and water-resistant material with the look and feel of precious wood. Material obtained from renewable raw material, resistant to water, sun, wind and cold and that does not splinter - even after many years. A material which is saving resources and always features consistent high quality.

We have invented it. And it can do a lot more than wood.

Resysta is extremely resistant and has an exceptional eco-balance. Made from rice husks, (an agricultural raw material, which has so far not been used worldwide) it sets new standards in terms of sustainability. The haptic impression is very pleasant and the possibilities almost infinite. At the same time the material is easy to process with counter-rotating twin-screw extruders.

»Resysta is extremely resistant and has an exceptional eco-balance«

»Resysta deserves the title ›The better wood‹ in all aspects«

(Professor Dr. Stetter)

An outstandingly awarded material

red dot award: product design 2012 for Resysta Marine

Nominated for the design award of the Federal Republic of Germany

Innovation award architecture and building industry for sustainability

Major anniversary completion in the category »construction«

Design & Product Award in the category »Design Materials«

Resysta Coloring

Coloring of surfaces is easy and quick. The water-based colors can be handled entirely odorless. They are extremely quick-drying and can be refinished at any time. The direct pigment application on the surface ensures very long-lasting UV-resistance.

Resysta: simply extrude!

Technical Data

Density	ASTM D2395:2002	approx. 1.46 g/cm³
Coefficient of Linear Thermal Expansion	ASTM D696	3.6x10(-5) mC
Weathering and UV Resistance	QUV Test	Resysta surfaces treated with glaze show extremely high resistance
Skid Resistance	DIN 51097	C Rating (highest rating)
Brandverhalten (German Standard)	EN ISO 11925-2	B2, normal flammability (by adding flame retardants, a higher rating of B1 can be reached)
Fire Behaviour (US Standard)	NFPA	A Rating (flame propagation 25, smoke emission 450)
Fire Behaviour (British Standard)	BS 476 Part 6&7	Rating 1
Durability (Resistance to Wood-Destructive Fungi)	DINV ENV 12038:2002	the material has not been affected, highest durability - Class 1
Emission	DIN EB ISO 9001/14001	passed
Brinell Hardness (HB)	EN 1534	81,1 N/mm²
Friction Coefficient μ untreated	EN 13893	0,46
Friction Coefficient μ with 2K	EN 13894	0,52
Screw Withdrawal Resistance	EN 320.2011-07	5777 N
heat conductivity	EN 12664	0.199 W/(mK)
water vapor permeability	DIN EN ISO 12572	μ=1300 -> sd 7.22m diffusion inhibiting
Water Absorption at 100% ambient air humidity	ISO 62	0,31%
Bending Strength	ISO 178	46 N/mm²
Bending Modulus	ISO 178	3850 N/mm²
Tensile Strength	ISO 527	21,8 N/mm²
Tensile Modulus	ISO 527	2340 N/mm²
Shearing Strength	EN 392	16,8 N/mm²

Resysta is tested by renowned institutes worldwide according to German, British, European and American standards.