
made of Resysta
Re-Holz
DESIGN - INNOVATION - ENVIRONMENT
One
Material
unlimited
Possibilities
15 YEARS
WARRANTY
• no swelling
• no cracking
• no splintering
• no rotting
made of Resysta
Re-Holz

100 %
NO WOOD
WATERRESISTANT
NO WPC
100 %

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.

Resysta is available in many different formulations. Beyond extrusion, injection-molding and foaming is possible. Resysta is IMO (International Marine Organisation)-certified in the required fire protection and Resysta veneer has recently won the Red Dot Award. Thanks to our color concept it is possible to design a wide range of colors for all its forms of appearance.

DESIGN WITH RESYSTA

RESYSTA: UNIQUE MATERIAL WITH BIPOLAR PROPERTIES

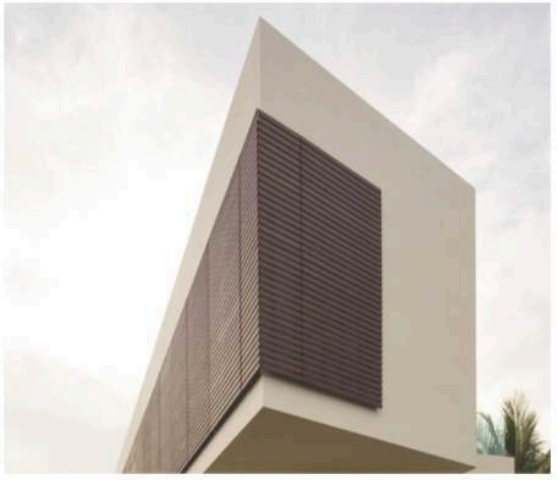
A complex procedure (PTRH-Technology) enables us to treat the rice husk in a way that – for the first time - provides for a process taking place between a natural fiber and a polymer. This allows for the rice husk to entirely combine with the polymer. Therefore the positive properties of the silicates, 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.

ONE MATERIAL ENDLESS POSSIBILITIES






One Material, Unlimited Possibilities

Decking System

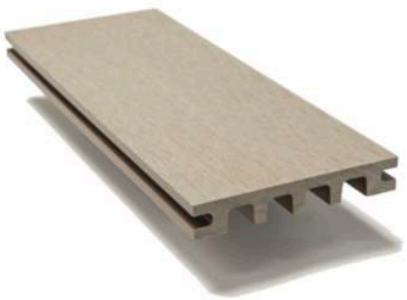
DKG 14025 BE
(W x H x L) 140 x 25 x 2900 mm

DKG 7.5 / 1
(W x H x L) 190 x 25 x 2900 mm

DKG 12522
(W x H x L) 125 x 22 x 2900 mm

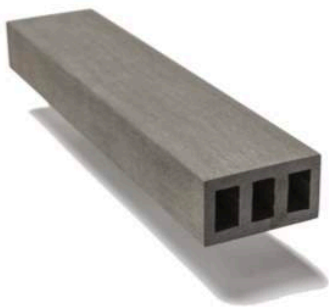
DKG 14038
(W x H x L) 140 x 38 x 2900 mm

DKN 12522
(W x H x L) 125 x 22 x 2900 mm



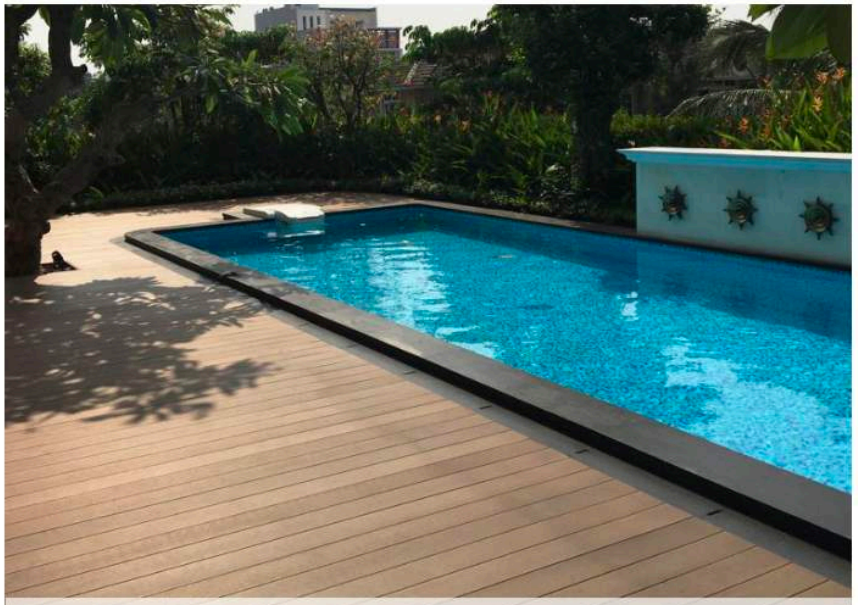
RUS 5528
(W x H x L) 55 x 28 x 2900 mm

RUH 7038
(W x H x L) 70 x 38 x 2900 mm



T4A CLIP

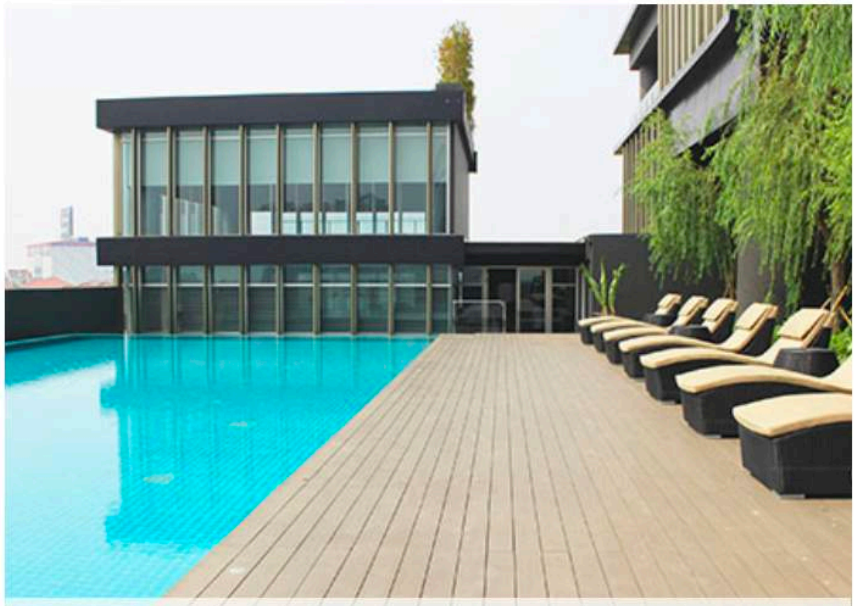
Applications



Jakarta, Indonesia, 2017

Ocean Drive, Miami, USA, 2015

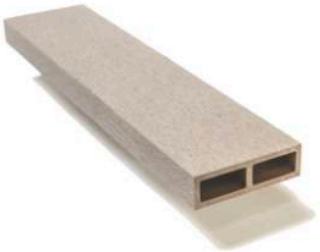
Oasis Hotel, Singapore, 2010



The Saumata, Jakarta, Indonesia, 2017

Universal Profile

FPH 7020/3.5
(W x H x L) 70 x 20 x 2900 mm

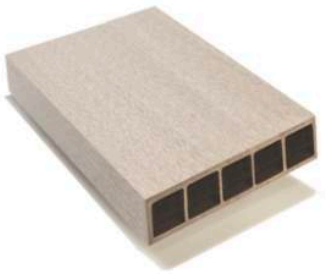


FPH 9015
(W x H x L) 90 x 15 x 2900 mm

FPHG 14020
(W x H x L) 140 x 20 x 2900 mm

FPH 7038
(W x H x L) 70 x 38 x 2900 mm

FPH 30050
(W x H x L) 300 x 50 x 2900 mm

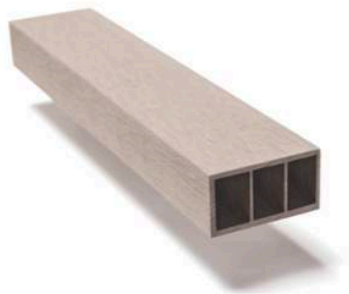


FPHG 20020
(W x H x L) 200 x 20 x 2900 mm

FPS 7020
(W x H x L) 70 x 20 x 2900 mm

FPHR 6520
(W x H x L) 65 x 20 x 2900 mm

FPH 10060
(W x H x L) 100 x 60 x 2900 mm



FPH 5528
(W x H x L) 55 X 28 x 2900 mm

ARO 180
(W x H x L) 180 x 44 x 2900 mm

Applications

Private Villa, USA 2015

Athens, Greece, 2014

Private House, USA, 2012

Starbucks, USA, 2014

Cladding System

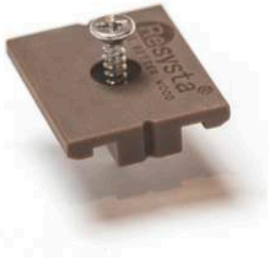
CPT 95
(W x H x L) 95 x 14 x 2900 mm

CPT 140
(W x H x L) 140 x 15 x 2900 mm

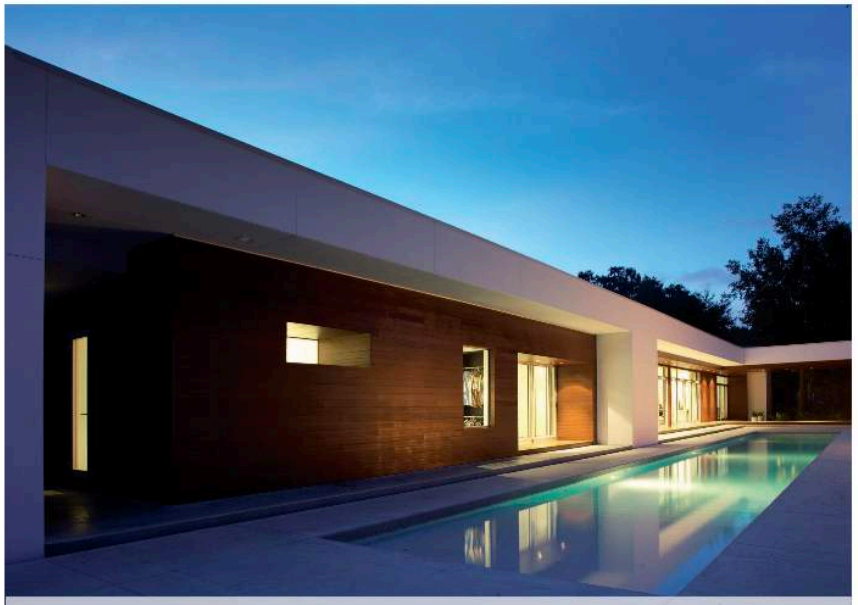
RUS 5528
(W x H x L) 55 x 28 x 2900 mm

RUH 7038
(W x H x L) 70 x 38 x 2900 mm

CPT CLIP
Clip for Cladding System

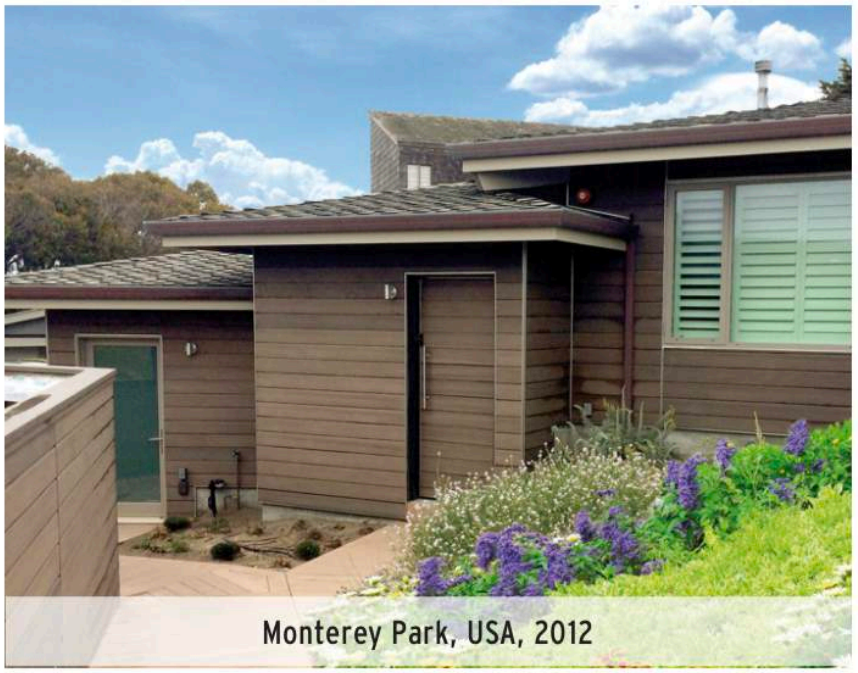


Applications



Lake House, Florida, USA, 2009

Store, USA, 2015



Monterey Park, USA, 2012

Helensburgh, Great Britain, 2015

Universal Performance Board

WATER-RESISTANT PANEL WITH THE NATURAL LOOK & FEEL OF WOOD

Re-Holz UPB sheets can be processed, surface treated or not, with conventional woodworking machines. Easy miling, sawing, grinding, screwing, nailing, tacking and glueing with plastic adhesive. One board with infinite use, it is applicable in any design environment and providing possibilites for different color concept.

Applications:
Flooring
Panel System
Wall-cladding
and more possibilities.

Dimensions available:

Thickness in mm	Width x Length in mm
8	1220 x 2440
12	1220 x 2440
16	1220 x 2440
20	1220 x 2440
25	1220 x 2440

ADVANTAGES AT A GLANCE

100% WATER-RESISTANT
Water- and weather-resistant
Salt and chlorine-water-resistant
UV-resistant. No swelling

SUSTAINABILITY
100% recyclable
100% no wood

FLEXIBLE DESIGN
Generous plate dimensions
Easy handling

TERMITE- AND MOULD-RESISTANT
Resistant against wood-destroying moulds and will not be attacked by termites

NEW APPLICATIONS
Opens new possibilities that are not conceivable with wood

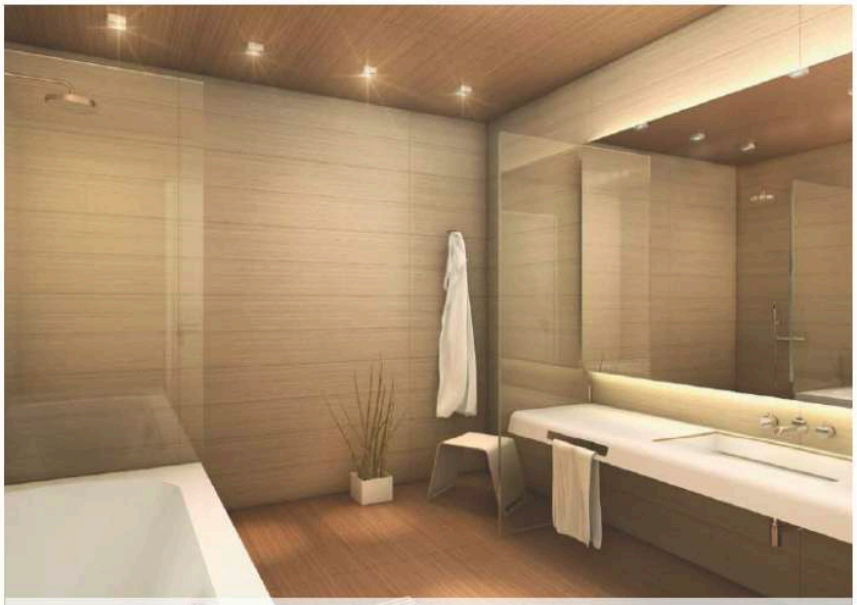
NO TEARING & SPLITTING
Smooth surface,
due to lack of cracking
No chips

COLOR CONCEPT
Surface individually colored
Resysta paints, varnishes and oils

NO ROTTING
Can be installed directly
in the ground

THERMOFORMABLE
Resyta can be shaped under the influence of heat

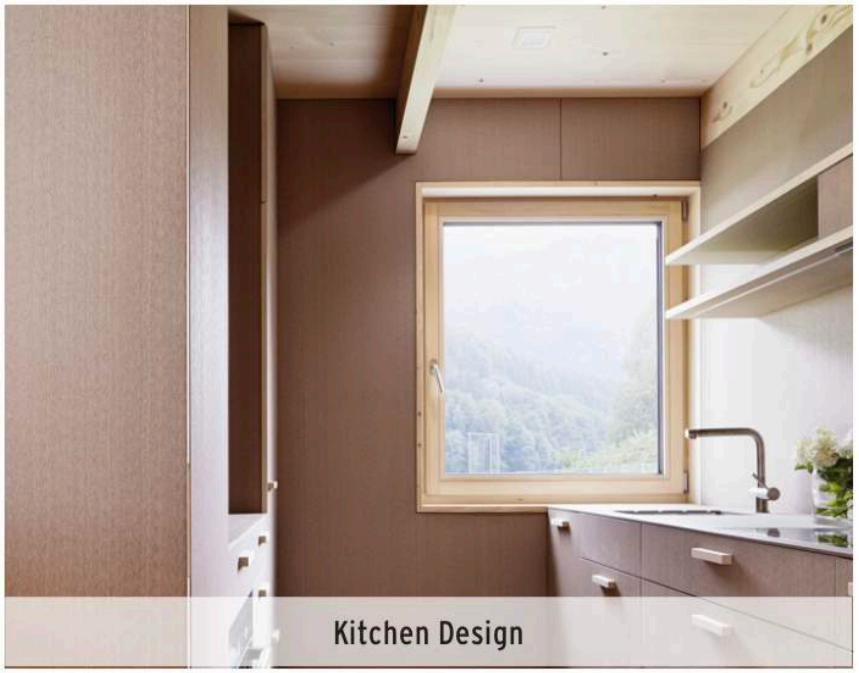
Applications



Bathroom Design

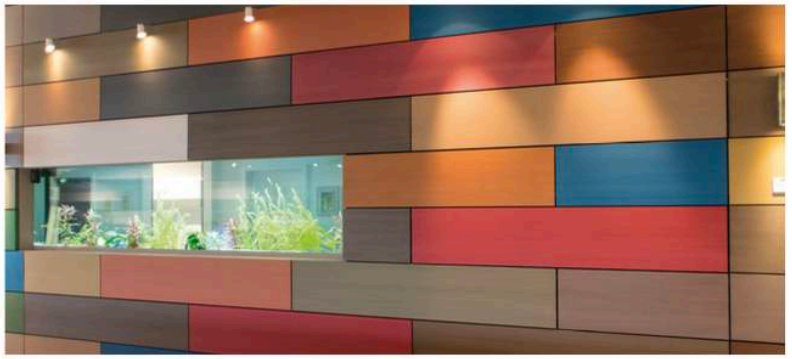
Romano Floor Design

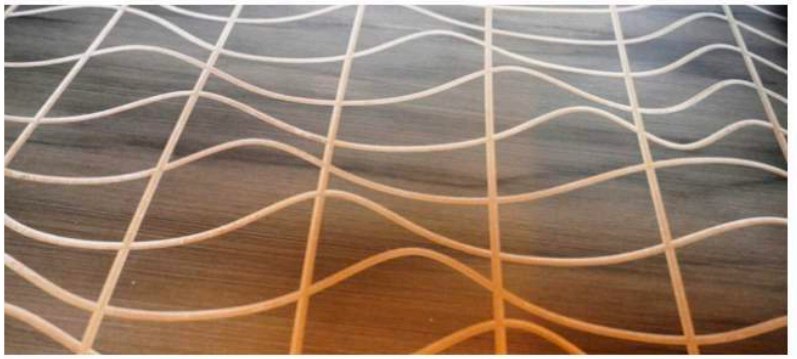
Resysta Showroom, Germany



Kitchen Design

Color Concept





With our specially developed products for Re-Holz surfaces your floor can be efficiently protected against penetration of dirt and soiling due to wear or environmental influences. A choice color range allows you to design the surface quickly and easily according to you individual imagination and - if necessary - re-treat the surface accordingly. Re-Holz glaze FVG is a water-based product, odorless and fast-drying. All color shades can be applied in different layers and colors and are miscible. When using dark-colored glazes scratches are more clearly visible due to the distinct constrast in comparison to the original color. Special sealants allow for even better durability of the surface.

Resysta Top Oil (RTO) is a naturally tinted finish for untreated and pre-oiled Re-Holz surfaces. By using resistant, weatherproof oils and microfine color pigments, UV radiation is effectively blocked and Resysta is perfectly protected. Surfaces treated with RTO are water-repellent and free of toxins and allergenic terpenes (e.g. citrus terpenes, turpentine oil, etc.). RTO contains hydrocarbons free of aromatic compounds, refined natural oils based on soybean, sunflower and rapeseed oil, unleaded driers and natural pigments.

B 01 RUST

B 02 PALISANDER

B 03 WALNUT

B 04 SIAM

B 05 JAVA TEAK

B 06 AGED TEAK

B 07 BURMA

B 08 MAHAGONI

Re-Holz made of Resysta can do everything that wood can and much more

- 100% NO WOOD
- 100% NO WPC
- WEATHERRESISTANT
- WATERRESISTANT
- RESISTANT TO SALT WATER
- BAREFOOT FRIENDLY
- NO SPLINTERING
- NO SWELLING
- NO CRACKING
- NO ROTTING
- SLIP RESISTANT
- INDIVIDUAL COLORING
- RECYCLABLE
- LOW-MAINTENANCE
- NO INSECT INFESTATION OR FUNGAL DAMAGE
- GLUEABLE
- CLASS A FIRE RATING

»RESYSTA IS EXTREMELY RESISTANT AND FEATURES AN EXCELLENT ECO-BALANCE«

Technical and ecological assessment of the new material Resysta:

Resysta looks like wood and stands out for its high mechanical strength, thermal stability as well as **chemical resistance. Unlike wood, Resysta is swell-, splinter- and crack-free, does not gray or fade** and withstands pest infestation. Resysta products are therefore **very durable** without requiring special care or maintenance. Resysta is **a true alternative to tropical wood.**

It is therefore especially suitable for outdoor use like garden furniture and outdoor decking as well as for wellness and pool areas, where high strain, aggressive weather, temperature and environmental influences take effect. Resysta products furthermore provide for an exceptionally beneficial eco-balance. In short: **Resysta deserves the title »The better wood« in every sense.**

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. Stetter)

reddot design award

red dot award:
product design 2017
for Resysta UPB Board

reddot design award

red dot award:
product design 2016
for Resysta Veneer

reddot design award

red dot award:
product design 2012
for Resysta Marine

Resysta is awarded during the course of the Innovation Award Architecture and Building, category „Sustainability"

MaterialPREIS2013

Materialpreis 2013
category "Innovation"

dwell ON DESIGN

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

DETAIL

Zeitschrift für Architektur + Baudetail · Review of Architecture · Revue d'Architecture

Resysta has been awarded
at the distinguished anniversary
contest in the category
"Construction"

Technical Data

Density	ASTM D2395:2002	approx.1.46 kg/m³
Coefficient of Linear Thermal Expansion	ASTM D696	3.6x10(-5)mC
Water Absorption and Air Humidity Behaviour	ASTM D1037:2006a	none or very low water absorption (only surface wetting)
Weathering and UV Resistance	QUV Test	Resysta surfaces treated with glaze show extremely high resistance
Skid Resistance	DIN 51097	C Rating (highest rating)
Fire Behaviour (German Standard)	EN ISO 11925-2	B2 normal inflammable (with additives B1 can be achieved)
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 varnish	EN 13894	0,52
Screw Withdrawal Resistance	EN 320.2011-07	5777 N
Heat Conductivity (λ)	EN 12664	0.199 W/(mK)
Water Vapour Permeability	DIN EN ISO 12572	μ=1300 -> sd 7.22m diffusion inhibiting
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
Resistance to Mould Fungal Decay	CEN/TS 15083-2	The material features almost no mass loss, highest durability classification 1 (very durable)
Resistance to Termites	ASTM D3345-08	Resistant to termite infestation (coptotermes curvignathus), very little loss of mass - very high durability
Electric surface resistance and volume resitivity	Specific surface resistance and volume resitivity	Surface resistance Rx=8,0*10(13) Ω Specific surface resistance α=8,1*10(14) Ω Volume resitivity Rx=2,2*10(13) Ω Specific volume resitivity α=6,3*10(14) Ω

Globally renowned institutions carry out tests according to German, British, European and US standards.

ift ROSENHEIM

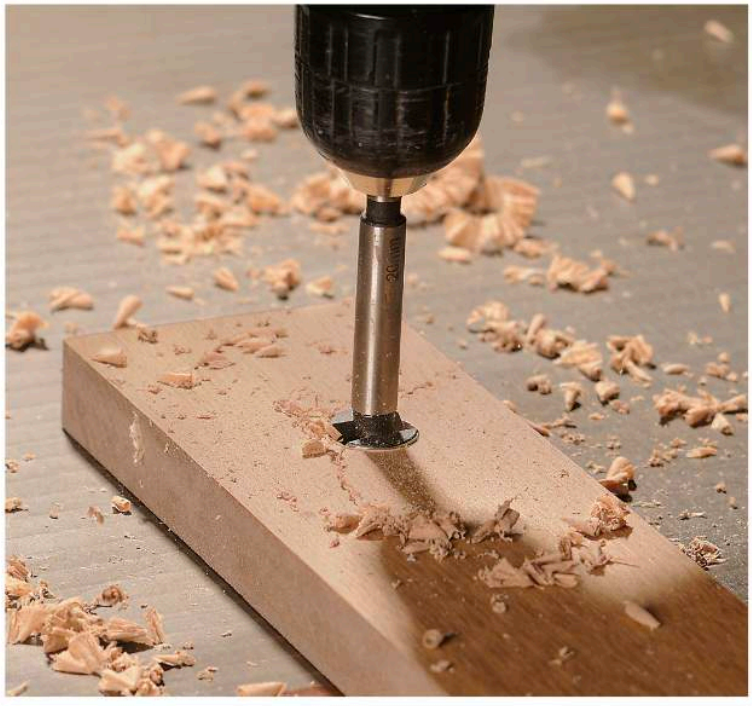
eph Entwicklungs- und Prüflabor Holztechnologie

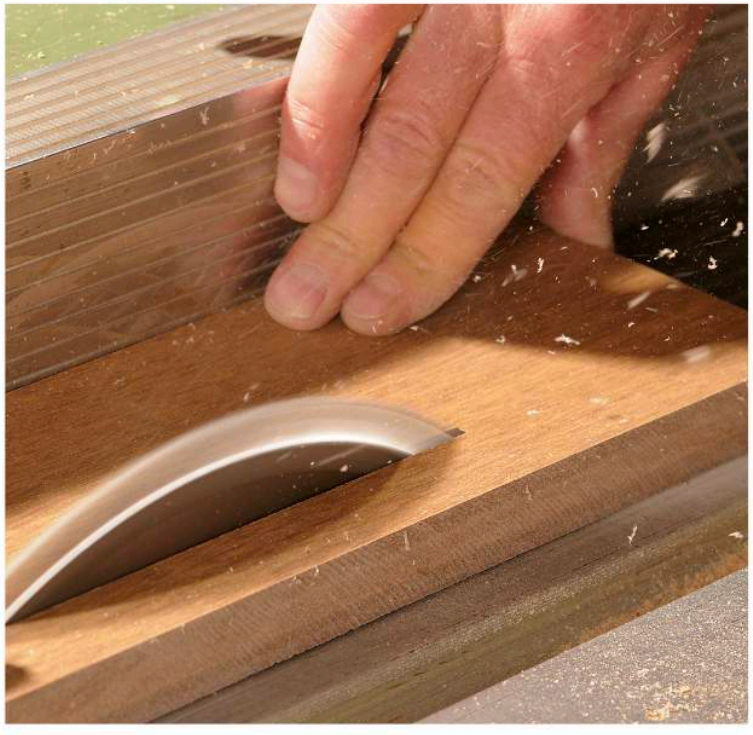
TÜVRheinland®

LGA

BUREAU VERITAS 1828

If you like wood, you will love Re-Holz made of Resysta





Carpenters can process the material like it's natural model

made of Resysta®

Re-Holz

DESIGN - INNOVATION - ENVIRONMENT

The Future Formula is called Resysta.

Raw materials used:

approx. 60 % rice husk + approx. 22 % rock salt + approx. 18 % mineral oil = Resysta

Re-Holz made of Resysta – one material, unlimited possibilities

PT. RADIN MITRA LESTARI

www.re-holz.com