

# SPECIFICATION

## TECHNOLOGY&CHARACTERISTICS

Anyone working with wood will be enthused about Resysta. Like its natural model it can be sawn, drilled, painted, sanded or oiled. However, there is one decisive advantage: Resysta does neither crack nor splinter and its cutting wastes are 100% recyclable. The different profiles of Resysta are produced in an extruder and can be used for many applications.

## MATERIAL

Material	Resysta Homogenous extrusion
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## RAW MATERIALS USED

Raw materials used	Rice husks Common salt Mineral oil	approx. 60% approx. 22% approx. 18%
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## MATERIAL CHARACTERISTICS

Density	ASTM D2395:2002	approx. 1.46 g/cm <sup>3</sup>
Coefficient of linear thermal expansion	ASTM D696	3,6 x 10 <sup>(-5)</sup> mC
Water Absorption & Humidity	ASTM D1037:2006a	Little up to no water absorption (only surface moistening)
Weathering and UV Resistance	QUV Test	With glaze treatment, Resysta surfaces are extremely resistant
Slippery Test (wet area barefoot)	DIN 51097	Class C (highest class)
Fire Rating (german/european norm)	EN ISO 11925-2	B2 (E) - standard flammable (with additional treatment B1 reachable)
Fire rating according NFPA (US Norm)	ASTM E84	Class A (flame propagation 25, smoke emission 450)
Fire rating (British standard)	BS 476 Teil 6&7	Class 1
Durability Resistance against wood-destroying fungi (basidiomycetes)	DIN V EN V 12038:2002	the material has not been affected, highest durability - Class 1
Emission	LGA-tested safety & contamination	LGA test passed
Brinell hardness (HB)	EN 1534	81,1 N/mm <sup>2</sup>

Coefficient of sliding and friction $\mu$ untreated	EN 13893	0,46
Coefficient of sliding and friction $\mu$ with 2K varnish	EN 13894	0,52
Axial Withdrawal Force (of Screws)	EN 320.2011-07	5777 N
Thermal Conductivity ( $\lambda$ )	EN 12664	0.199 W/(mK)
Water Vapour Transmission	DIN EN ISO 12572	5777 N
Bending Strength	ISO 178	46 N/mm <sup>2</sup>
Bending Modulus	ISO 178	3850 N/mm <sup>2</sup>
Tensile Strength	ISO 527	21,8 N/mm <sup>2</sup>
Tensile Modulus	ISO 527	2340 N/mm <sup>2</sup>
Tensile Modulus	ISO 527	2340 N/mm <sup>2</sup>
Shearing Strength	EN 392	16,8 N/mm <sup>2</sup>
Durability - Resistance against rotting fungi	CEN/TS 15083-2	No attack by the test fungi, highest durability class 1 (very durable)
Durability against mold fungi and wood discoloring fungi	EN 15534-1:2012	Durability against the wood discoloring fungi (very durable)
Durability against subterranean Termites	ASTM D3345-08	High Durability against subterranean Termites - nearly no weight loss
Specific surface and volume resistances	DIN IEC 60093 measuring voltage 100 V	Surface resistance Rx=8,0*10(13) $\Omega$
		Specific surface resistance $\alpha$ =8,1*10(14) $\Omega$
		Volume resistance Rx=2,2*10(13) $\Omega$
		Specific volume resistance $\alpha$ =6,3*10(14) $\Omega$

## PROCESSING

Work	Like wood with wood processing machines: Cutting, milling, drilling, sanding, gluing and screwing
Surface treatment	Applying original Resysta stain and 2K sealer with brush



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