TRESPA® Technical Data Sheets

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Interior Panels

Technical Specification

Trespa® TopLab® PLUS redefines sustainable worktops - is engineered for exceptional durability, chemical ressitance, and easy maintenance, continuing Trespa's legacy of reliable surface materials for generations to come. Featuring a crystal matt finish and a thoughtfully curated collection of colours, Toplab® PLUS delivers refined elegance and high perfromance to demanding laboratory environments.

The advantage of Dry Forming

With the HPL market largely reliant on a kraft paper core, Trespa® wanted to think outside the box. Our solution was Dry Forming - our in-house production process which utilises wood chips and thermosetting resins to form a solid core, used for TopLab® PLUS ALIGN. All our wood-based raw materials are sourced from FSC or PEFC certified woodlands, ensuring a greater commitment to responsible sourcing within our supply chain.



Wood chips are

unloaded at Trespa





Resin and pigment are added



The impregnated fibres are dried, pressed and cut into sheets

Why TRESPA® TOPLAB® PLUS/PLUS ALIGN

sieved and refined



24 HOURS CHEMICAL RESISTANCE

Based on multiple test methods

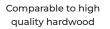


IMPACT RESISTANT

Solid and sturdy panels for everyday use



SMOOTH MACHINABILITY





Thanks to our surface technology developed in house

DOES NOT

SUPPORT

BACTERIAL GROWTH



Proven by third party evaluations



INSTALLATION

Using various visible or invisible fixing solutions



SCRATCH AND WEAR RESISTANT

Tested with diamond-lip point and abrasive paper



Proven by third party evaluations

Shaping the future with TRESPA® TOPLAB®PLUS

Trespa® TopLab® *PLUS ALIGN* is a ground breaking worktop material representing Trespa's global approach to sustainability. Combining the reliability and performance of TopLab® *PLUS* with increased renewable composition, TopLab® *PLUS ALIGN* sets a new standard for architectural surfaces. With an innovative core incorporating up to 85% bio-based carbon content, the carbon stored within this surface material surpasses the emissions related to its production. With this revolutionary approach, Trespa® TopLab® *PLUS ALIGN* provides the market with a more sustainable worktop solution, all without compromising performance or durability.

Innovative use of lignin

Lignin is contained in almost all dry-land plant cells; it's the glue that holds the plant together. As a complex polymer with many possible bonding patterns between individual units, lignin provides strength and rigidity.

By using refined lignin to replace fossil-based phenols within our resins, Trespa® TopLab® *PLUS ALIGN* incorporates up to 85% bio-based carbon content, setting a new industry standard.

This innovation enables a greater amount of carbon storage within the panel, surpassing emissions related to its production.

EBC Technology

Trespa® TopLab® *PLUS/PLUS ALIGN* get their unique surface properties through Electron Beam Curing (EBC) – Trespa's next generation technology, developed in-house to provide superior performance characteristics.

This non-thermal curing method uses high-energy electrons to harden the decorative layer, resulting in a smooth, closed surface with excellent cleanability and chemical resistance.

Healthier air quality

Trespa® TopLab® *PLUS/PLUS ALIGN* have achieved GREENGUARD Gold Certification for low chemical emissions for healthier indoor environments, giving you the assurance that VOCs will have no harmful impact on your air quality.

Chemical stress-tested

Beauty should never come at the expense of performance – that's why Trespa® TopLab® *PLUS/PLUS ALIGN* have been tested with over one hundred chemical agents and disinfectants, ensuring our surfaces are easy to clean and making their everyday maintenance remarkably simple. This high chemical resistance makes TopLab® *PLUS/PLUS ALIGN* the preferred worktop solution for laboratories, and environments where aggressive solvents may be used.

Material Property Datasheet

Decorative high-pressure compact laminates according to EN 438-4:2005 of thicknesses of 13 mm (\pm 1/2 in) or greater for interior scientific surface solutions. Sheets consisting of layers of wood-based fibres (paper and/or wood) impregnated with thermosetting resins and surface layer(s) on one or both sides, having decorative colours or designs. A transparent topcoat is added to the surface layer(s) and cured by Trespa's unique in-house technology Electron Beam Curing (EBC), to enhance the scratch and chemical resistance. These components are bonded together with simultaneous application of heat (\geq 150° C / \geq 302° F) and high specific pressure (> 5 MPa) to obtain a homogeneous non-porous material with increased density and integral decorative surface. They are available in the Standard grade (CGS).

Properties	Test method	Property or attribute	Unit	Result A B
				Grade: CGS
				Standard: EN 438-4
				Colour/Decor: All
Surface quality				
	EN 438-2 : 4	Spots, dirt, similar surface defects	mm²/m²	≤1
Surface quality			in²/ft²	≤ 0.0001
Surface quality		Fibres, hairs & scratches	mm/m²	≤ 10
			in/ft²	≤ 0.036
Dimensional tolerances				
	EN 438-2 : 5	Thickness	mm	13.0 ≤ t < 16.0: +/- 0.60
				16.0 ≤ t < 20.0: +/- 0.70
				20.0 ≤ t ≤ 25.0: +/- 0.80
			in	0.4724 ≤ t < 0.6299 : +/- 0.0236w
				0.6299 ≤ t < 0.7874 : +/- 0.0275
				0.7874 ≤ t ≤ 0.9842 : +/- 0.0315
			mm/m	≤2
	EN 438-2:9	Flatness	in/ft	≤ 0.024
Dimensional tolerances			mm	+ 5 / - 0
	EN 438-2:6	Length & width	in	+ 0.1968 / - 0
			mm/m	≤1
	EN 438-2:7	Straightness of edges	in/ft	≤ 0.012
	Trespa standard	Squareness	mm	2550 x 1860 : difference between diagonals (x-y) ≤ 4
				3050 x 1530 : difference between diagonals (x-y) ≤ 4
			in	100.39 x 73.23 : difference between diagonals (x-y) ≤ 0.1575
				120.08 x 60.24 : difference between diagonals (x-y) ≤ 0.1575
Physical properties				
	EN 438-2:10	Wear resistance - Revolutions (min)	Initial point	≥ 150
Resistance to surface wear			Wear value	≥ 200
Resistance to impact by large diameter ball	EN 438-2:21	Indentation diameter - 6 ≤ t mm with drop height 1.8m	mm	≤ 10
Resistance to scratching	EN 438-2:25	Force	Rating (min)	≥4
Resistance to dry heat (160° C / 320° F)	EN 438-2:16	Appearance	Rating (min)	≥ 4
Resistance to wet heat (100° C / 212° F)	EN 12721	Appearance	Rating (min)	≥ 4
Resistance to immersion in boiling water	EN 438-2 : 12	Mass increase (% max)	t≥6mm	≤]
		Thickness increase (% max)	t≥6mm	≤]
		Appearance	Rating (min)	≥ 4
			Longitudinal %	≤ 0.25
Dimensional stability at elevated temperature	EN 438-2:17	Cumulative dimensional change	Transversal %	≤ 0.25
Light fastness (xenon arc)	EN 438-2:27	Contrast (Wool scale)	ASTM G53-91 (314-400nm)	≥ 6
Resistance to water vapour	EN 438-2:14	Appearance	Rating (min)	≥ 4
Resistance to cigarette burns	EN 438-2:30	Appearance	Rating (min)	≥ 4
Resistance to crazing	EN 438-2:24	Appearance	Rating (min)	≥ 4
Modulus of elasticity	EN ISO 178	Stress	MPa	≥ 9000
Flexural strength	EN ISO 178	Stress	MPa	≥ 100
Tensile strength	EN ISO 527-2	Stress	MPa	≥ 70
	EN ISO 1183	Density	g/cm3	≥ 1.35
Density	EN 150 1105	Density		
Other properties Release of formaldehyde	EN 717-2	Classification	Class	EI

A Due to conversion from metric values, the US values provided are approximate.

B All data are related to the products mentioned in the Trespa® TopLab®PLUS standard delivery programme.

Get inspired

Trespa® TopLab® panels are designed to withstand the challenges of demanding environments, ensuring durability, performance, and design versatility, all without compromising on aesthetic appeal.

		TRESPA* TOPLAB* PLUS
Surface	EBC technology	•
Core		Black
Thickness	13 mm (≈1/2 inch)	•
	16 mm (≈5/8 inch)	•
	20 mm (≈3/4 inch)	•
	25 mm (≈1 inch)	•
Size	1530 mm x 3050 mm (IF)	•
	1860 mm x 2550 mm (SF)	•
	1860 mm x 3650 mm (FF)	•
Finish	Crystal Matt	
Chemical Resitance	Double Sided	



Double sided decorative

Same colour for front and reverse side of the panel.

Duocolour Different colour for front and reverse side of the panel.

The Trespa® TopLab® Guarantee

10 year product warranty

Our panels are built to last. Feel confident about the durability of Trespa® TopLab® with our 10 year product warranty on all material properties declared on the Material Property Datasheet. Learn more about our warranty at Trespa.info

Certified performance

Crafted to perform in the most demanding interior environments, Trespa® TopLab® offers reliability and assurance, with certified performance tested to international standards. For laboratories and cleanrooms, Trespa® TopLab® PLUS/PLUS ALIGN are certified for certain cleanliness properties by Fraunhofer IPA under the Cleanroom Suitable Materials Scheme, and is tested for compliance to SEFA 3 criteria. Visit Trespa.info for a full range of certifications and available testing documentation.

Green building practices

Trespa® TopLab® products support green building practices and may contribute toward achieving LEED, BREEAM, and other sustainable building label certifications. All TopLab® products have achieved GREENGUARD Gold Certification for indoor air quality. Trespa® TopLab® may be available as part of the Programme for the Endorsement of Forest Certification™ (PEFC™) or Forestry Stewardship Council™ (FSC™) certification upon request, for restricted quantities and jurisdictions. Visit Trespa.info for product specific EPDs (Environmental Product Declarations), HPDs (Health Product Declarations), and other sustainable certifications.



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