RESOPAL® TRACELESS FACED BOARD PRODUCT DATA SHEET

1. MATERIAL DESCRIPTION AND COMPOSITION

RESOPAL Traceless Faced Board is in accordance with EN14322 and is intended for use in interior fitting and furniture.

The surface consists of a decorative paper coated with acrylic resin and thermoset with a high-tech curing process, which gives it a velvet touch against fingerprints.

The substrate is a composite substrate of a standard chipboard core with a MDF top layer on both sides, providing robustness, easiness of machining while offering a quality aesthetic finish.

- machining user-friendly and qualitative (cutting, drilling, milling, and fixing behavior)
- robustness (high bending strength and modulus of elasticity / high resistance to loads, high durability)
- quality and longevity of the surface (impact resistance, surface aspect).

RESOPAL Traceless Faced Board surfaces have antibacterial properties. This contributes to surface hygiene. An expert opinion from an independent testing institute confirms a reduction in the number of germs of \geq 99.9% compared to the initial germ count.

RESOPAL Traceless Faced Board is available as a two-sided decorative panel with an antifingerprint surface (texture TB) and as a one-sided decorative panel with an anti-fingerprint surface (texture TB) on top side and a functional counterbalanced layer on the backside.

For one-sided decorative panel, the backing has a functional counterbalanced layer, which has neither decorative nor technical properties. The backing is available in 2 colors: black (for dark colors) or white (for light decors).



- 1 Decor paper both sides, acrylic resin impregnated
- 2 composite substrate: standard chipboard core with a MDF top layer on both sides



2. FORMATS

This information is available on our website <u>www.resopal.de/infobook</u> in accordance with our delivery program.

3. AREAS OF APPLICATION

RESOPAL Traceless Faced Board is suitable for interior fitting and furniture for vertical use. Horizontal use is only suitable for low stressed surfaces on the responsibility of the fitter.

The technical values from the chart below must be considered according to the application requirements.

4. TECHNICAL DATA

4.1 TECHNICAL PROPERTIES ACCORDING TO EN 14322

Table 1: Technical properties according to EN 14322

PROPERTY	TEST METHOD	UNIT	RESOPAL TRACELESS FACED BOARD
Physical properties, dimension			
Density	EN 323	g/cm³	650 +0-2%
Moisture content (ex-factory)	EN 322	%	8 +/-3
Thickness tolerance	EN 14323	mm	-0,3 / +0,5 mm
Length and width tolerance	EN 14323	mm	+/- 5
Straightness tolerance	EN 324-1 & 2	mm/m	≤ 1,5
Squareness tolerance	EN 324-1 & 2	mm/m	≤ 2
Flatness tolerance (thickness 19 mm)	EN 14323	mm/m	≤ 21
Mechanical properties			
Resistance to impact by 324g ball	EN 14323	mm Drop height	≥ 800
		Indent diameter	≤ 10
Surface cohesion	EN 311	MPa	≥ 1,0
Bending strength	EN 310	N/mm²	14
Modulus of elasticity	EN 310	N/mm²	2100
Internal cohesion	EN 319	N/mm²	0,35
Surface properties of TB ² (de	corative side)		
Dirts, spots, etc.		mm²/m²	≤ 2.0
Fibers, hairs, scratches	EN 14323	mm/m²	≤ 20
Edge damage	EN 14323	mm	≤ 10
Resistance to cracking	EN 14323	Class	5
Abrasion resistance	EN 14323	Revolutions	≥ 150
	EN 14323	Class	3A
Scratch resistance	EN 14323	Ν	≥ 1,5 N
Resistance to staining	EN 14323	Class ³ Group 1 Group 2	≥ 3 ⁴ ≥ 3
Light fastness (xenon arc)	EN 14323	Grey scale rating	4 - 5
Fire performance			
Fire rating	EN 13501-1	Euroclass	D-s1, d0
Calorific value	EN ISO 1716	MJ/kg	16
Health and environmental pr			
Formaldehyde emission	EN 16516	Classification Value	E1 ≤ 0.1ppm (≤ 124 μg/m³)
Antibacterial effect	JIS Z 2801 ISO 22196	Reduction in %	99.9

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¹ For applications with higher demands on flatness, we recommend the use of the symmetrical (two sided) panels.

² Surface properties are only for the TB surface. The backing is a functional counterbalanced layer, which has neither decorative nor technical properties.

³ Rating 5 - no visible change; Rating 4 - slight change of gloss and/or colour, only visible at certain viewing angles; Rating 3 - moderate change of gloss and/or colour or surface blistering; Rating 1 - Surface layers delamination.

⁴ A longer exposure time of hot liquids (e.g., tea, coffee), strongly staining substances (e.g., red wine, iodine, spices) may leave slight staining on light-colored surfaces. To avoid permanent staining, these stains must be removed immediately.

5. CERTIFICATIONS AND TESTS

Table 2: Certifications and test reports

PROPERTY	TEST METHOD	UNIT	RESOPAL TRACELESS FACED BOARD
Fire behaviour⁵	EN 13501-1	Euroclass	D-s1, d0
Building			
Formaldehyde Emission	EN 16516	Classification	E1 (≤ 0.1 ppm)
Emission VOC (Volatile organic compounds)	ISO 16000-9	Emission class according to French regulation (Décret no 2011-321)	A (scenario wall)
Environmental product declaration (EPD) ⁶	ISO 14025 EN 15804	Available	Yes
Antibacterial effect ⁷	JIS Z 2801 ISO 22196	Reduction in %	99.9
PEFC ⁸		Certification	Upon request
FSC ^{® 8}		Certification	Upon request

6. TRANSPORT AND STORAGE

RESOPAL Traceless Faced Board panels must be transported and stored flat, horizontal, with fullsurface contact and on a sufficiently large pallet.

RESOPAL Traceless Faced Board panels are not dangerous goods as defined by transport regulations, therefore labeling is not required.

Panels must be stored in a closed storage area under normal indoor conditions (10-30 °C and 40-65 % relative humidity), and protected against moisture and mechanical damage, with suitable protection. The protection placed on top of the pallet must be maintained whenever panels are removed from the stack. If the panels are stored for a long period of time, ensure flat storage, and place a panel on top to weigh on the laminates, otherwise the panels may warp or deform.

A protection panel (chipboard or MDF/HDF board of at least 12mm) must be used on bottom on wooden pallets. The top and the bottom panels on the pallet are more sensitive to climatic influences.

In case of vertical storage, we recommend an inclined position at 80 ° with full-surface support and a counter bearing on the floor to prevent slipping.

RESOPAL Traceless Faced Board panels have a protective film on both sides. The side with the texture TB has a Wilsonart protective film (W) and for the one-sided version the backing has a neutral film. The protective film should remain on the surface on both sides during processing until installation to avoid risk of scratches and dirt damaging the surface.

If the protective film remains on the surface during processing, the processor is responsible for carrying out a preliminary machinability test.

This does not dispense the customer in any way from a prior incoming goods inspection.

The shelf life of the protective film is a maximum of 6 months after the date of delivery.

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⁵ Consider details (e.g., Classification report, Official Journal of the European Union)

⁶ Environmental product declaration available on INIES website

⁷ Information Sheet Biocidal Regulation EU Nr. 528/2012

⁸ Please specify with your order

7. HANDLING AND MACHINING

Before starting, please inspect the product for damage and defects between panels prior to cutting or installation (including color and texture) and ensure that the production direction is considered. The product direction has an influence on the dimensional change as well as on mechanical strength and can have an influence on the appearance due to the reflection of light.

Due to the product-specific differences in production technologies (e.g., RESOPAL Compact, RESOPAL HPL or RESOPAL MFB etc.), even identical decor, structure or core board combinations can result in slight optical and tactile deviations across different product groups and formats. RESOPAL Traceless Faced Board (one-sided decorative) are non-symmetrical. This asymmetry can lead to deviations in flatness within the tolerances of 2mm/m, which must be considered depending on the application.

The usual safety regulations regarding dust removal and fire protection must be observed when processing RESOPAL Traceless Faced Board panels. Due to possible sharp edges, protective gloves should always be worn when handling RESOPAL Traceless Faced Board panels. Contact with dust does not cause any issues; nevertheless, there are a limited number of people who may have an allergic reaction to processing dust of all kinds (and therefore also to wood board dust).

RESOPAL Traceless Faced Board panels are wood/cellulose-based products, so the dimensions constantly adapt to the climatic environmental conditions. The product can be easily processed with woodworking machines. For a suitable tool recommendation of your individual machining please contact the tool manufacturer directly.

The protective film must be removed simultaneously on both sides.

7.1 CONDITIONING

RESOPAL Traceless Faced Board must be conditioned before processing (> 3 days). A good conditioning is achieved in a moderate interior climate (18-25 °C and 40-65 % relative humidity). These conditions are also recommended for the location where the product will be later used. If RESOPAL Traceless Faced Board will be exposed to consistently low or high humidity during its subsequent use, it is advisable to expose the panels to a correspondingly low or high level of humidity or increased temperature during conditioning.

More information on the handling and machining of RESOPAL Traceless Faced Board can be found in the Datasheet Machining and Installation Guidelines for RESOPAL Traceless Faced Board.



8. CLEANING AND CARE

RESOPAL Traceless Faced Board surfaces do not require special care due to their homogenic and resistant surface, even too many substances/chemicals⁹. Surfaces require no further treatment (e.g., with lacquers, paints, oils, waxes etc.), as they are neither corrosive nor oxidized.

For residue-free cleaning of RESOPAL Traceless Faced Board surfaces, these four steps must be followed:

01 Choose the appropriate cleaning aids (cloth/sponge/brush) - depending on the structure Choose the appropriate cleaning agent/solvent - depending on dirt residues.

02 Cleaning of the surface with the appropriate cleaning aids and cleaning agents/solvents.

- 03 Rinse of all cleaning agent/solvent with warm water.
- 04 Dry the surface with a soft cloth after cleaning

Clean the entire surface without too much "pressure" to avoid polish marks.

Due to the microstructure of Traceless Faced Board, it's important to regularly clean the surface according to the above instruction and clean with warm water to avoid the accumulation of dirt and residue of cleaning agent/solvent into the tight structure folding.

In the case of stubborn stains on Traceless Faced Board surfaces with a narrow structural fold (e.g., #TB), the dirt can be removed using a damp melamine sponge or cloth with the appropriate fiber (e.g., JEMAKO¹⁰ or similar). Other stubborn stains (e.g., varnish) can be removed with organic solvents (e.g., ethanol, isopropanol, acetone, etc.).

Abrasive cleaning aids (e.g., scouring powder, steel wool) must not be used, as these alter the surfaces. At the beginning carry out cleaning tests with each cleaning agent/solvent on non-visible areas.

Strongly staining substances (e.g., mustard, curcuma etc.) may leave slight stains on the surface of RESOPAL Traceless Faced Board panels. To avoid permanent staining these stains must be removed immediately⁴.

The visual perception of traces of daily use (e.g., gloss deviations, dirt, and grease stains etc.) are influenced by the decor and surface texture. The traces of use are more visible on smooth surfaces and become even more visible in combination with dark decors.

For further information, please refer to the technical data sheet on cleaning and care instructions of RESOPAL melamine and acrylic surfaces.



⁹ Data Sheet Resistance RESOPAL HPL, Data Sheet Resistance to Disinfectant RESOPAL HPL

¹⁰ Data Sheet Cleaning and care introduction tested cleaners

9. SUSTAINABILITY AND ENVIRONMENT

Resopal is certified according to EN ISO 14001 and EN ISO 50001.

The surface of RESOPAL Traceless Faced Board is a cured, and therefore inert, duroplast. The formaldehyde emissions comply with the limit value of 0.1ppm according to EN16516 (equivalent to 0.05ppm according EN717-1) and according to German requirements (Chemikalienverbotsverordnung).

Furthermore, the emissions of volatile organic compounds (VOC) are so low that, depending on the test scenario, the following classification according to the French VOC regulation is given in the Eurofins test report:

Class A (with the test scenario for walls with a loading factor of $1.0 \text{ m}^2/\text{m}^3$)

The Environmental Product Declaration (EPD)⁶ describes the excellent environmental properties of RESOPAL Traceless Faced Board. Based on clearly defined parameters, it provides quantitative, verified, and objective information on the impact of RESOPAL Traceless Faced Board on the environment and can be used for certification of sustainable building (e.g., DGNB, LEED, BREEAM). The entire lifecycle of Traceless Faced Board (raw material extraction, production, transportation, use, disposal) is taken into consideration.

RESOPAL Traceless Faced Board panels can be offered as a PEFC or FSC[®] certified product on request. In addition, it meets the requirements of EUTR Regulation (EU) No. 995/2010.

RESOPAL Traceless Faced Board panels are articles and not a chemical substance, therefore the REACH regulation is not applicable. However, it is important to ensure the exchange of information between Resopal and the raw material suppliers regarding REACH-relevant components (for more information, please refer to the REACH statement). We hereby confirm that no substance from the Candidate List is used in our above-mentioned products in a quantity requiring information ($\geq 0,1\%$ w/w) and that we comply with the requirements of Annexes XIV and XVII of the REACH Regulation.

10. DISPOSAL AND ENERGY RECOVERY

RESOPAL Traceless Faced Board panels can be disposed on controlled waste disposal facilities (e.g., landfills) that comply with the applicable national and regional regulations. According to the European Waste List Regulation, wood based panels waste is classified with code 030105 (wood wastes) or 200301(mixed municipal waste).

RESOPAL Traceless Faced Board panels are particularly suitable for thermal recycling due to its high calorific value (16 MJ/kg). During complete combustion at 700 °C, the boards burn to form water, carbon dioxide and nitrogen oxides. Therefore, RESOPAL Traceless Faced Board panels meets the requirements for energy recovery according to § 8 of the German Recycling Management Act. The conditions for good combustion are met in modern, officially approved industrial incineration facilities. The ashes from these incineration processes can be taken to controlled landfills.

RESOPAL Traceless Faced Board panels can be recycled. By grinding the product, the wood particles can be reused to produce new chipboards.

11. OVERVIEW OF TECHNICAL DOCUMENTS

General

Resopal Brochure INFOBOOK Datasheet Machining and Installation Guidelines for RESOPAL Traceless Faced Board

Certifications and test reports

Declaration of Conformity RoHS Test Report VOC Indoor Air Comfort Gold A Expert opinion antibacterial efficiency ISO 22196 JIS Z2801 Information sheet biocidal regulation EU Nr. 528/2012

Cleaning and Care

Data Sheet Cleaning and care of Resopal melamine and acrylic surfaces Data Sheet Cleaning and care instructions tested cleaners Data Sheet Resistance to Disinfectant RESOPAL HPL Data Sheet Resistance RESOPAL HPL

Sustainability and environmental

Environmental Product Declaration (EPD) for direct coated boards (INIES) Certificate PEFC Certificate FSC® Certificate EN ISO 9001 Certificate EN ISO 14001 Certificate EN ISO 50001 Environmental data sheet LEED Environmental data sheet BREEAM Environmental passport RESOPAL Traceless Premium Traceless Faced Board Regulation REACH Customer information on melamine as SVHC substance

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