

Laboratory materials, wall lining & cubicles.



THE RIGHT PRODUCTS OR YOUR APPLICATIONS

Resistance²

Combining the very best intrinsic qualities: extreme resistance to the most aggressive chemicals, inherent strength, long lasting

durability, and an easy-to-clean surface. With the unique RE surface technology, Max Resistance2 is the superior work surface choice for the most extreme laboratory conditions. Available in both black and colored cores, it opens up new design possibilities that will last.

Max Compact Interior Plus

When requirements become more demanding, then only the best will do. Fitting out ambitious buildings is no exception – and is therefore one of the specialty areas of Fundermax.

Max Compact Interior provides you with a plethora of possibilities, decors and formats while being truly sustainable.

Panelling

Our interior range for walls and ceilings offers two main categories of technical natural wood panels, all of which require no specific maintenance apart from normal cleaning.

NATURPANEL-W is designed for environments subject to high levels of traffic and abrasion, such as museums, offices, hotels or institutional buildings.

NATURHARDPANEL-W is highly water resistant, perfect for installing in moisture rich environments such as bathrooms, gyms, saunas and swimming pools.













Max Resistance² The best in its class

Max Resistance2 combines the very best intrinsic qualities: extreme resistance to the most aggressive chemicals, inherent strength, long lasting durability, and an easy-to-clean surface. What's more, it opens up new design possibilities.

Permanently resistant

Max Resistance 2 is extremely resistant to chemical and physical abuse – thanks to Fundermax's patented technology. Created from tested and certified raw materials, compressed at high temperatures under intense pressure, the end result is a homogenous, decorative and extremely resistant panel. As it is completely uniform and joint free, it's also permanently resistant to moisture.

For extreme demands

With excellent physical properties coupled with its ability to resist harsh chemicals (including acids) that are used on the open bench across a plethora of industry sectors. Including, but not limited to, laboratories within: Colleges & Universities; Pharma and Biotech; Government; K-12; Clinical Research and Diagnostic; CRO & CMO; Hospitals; as well as other sectors such as the petrochemical & food industries.



Moisture resistant



Excellent machinability



Heat resistant up to 180°C/360F



Perfectly disinfectable



Double sided



Durable



Excellent chemical resistance



Resistant to Thermal-shock



Easy to clean



Anti-static



Scratch resistant



Ease of installation



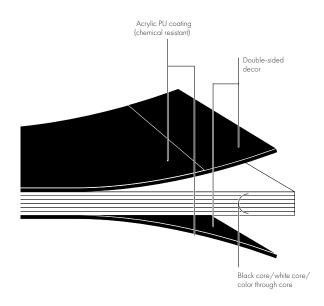
Impact resistant



Max Resistance²

Max Resistance2 is a duromer high pressure laminate (HPL), produced in laminate presses, under high pressure at high temperature, in accordance with EN 438-4, type CGS.

Due to its scientifically developed, double-cured polyurethane acrylic coating, Max Resistance2 stands up to the toughest tests – unaffected by solvents, most acids and the harshest chemicals. Easy to clean, easy to disinfect and at the same time wear and scratch resistant, this innovative material significantly extends the life cycle of your laboratory work surface.



Properties tested according to EN 438	Standard requirement	Max Resistance ²
Physical data		
Density DIN 52350/ISO 1183	≥ 1.35 g/cm³ (=0.049 lb/inch³)	≥ 1.35 g/cm³ (=0.049 lb/inch³)
Thickness (e.g.) EN 438-2, point 5		10 mm (=0.39")
Weight		13.5 kg/m² (=2.77 lb/sqf)
Mechanical properties		
Resistance to stress abrasion EN 438-2, point 10 (Initial Point)	≥ 150 U	450 U*
Resistance to impact EN 438-2, point 21	≤ 10 mm (=0.39")	8 mm (=0.32")
Resistance to scratching EN 438-2, point 25	degree ≥ 3; ≥ 4 N	3 - 4 degree; 4 - 6 N
Flexural strength EN ISO 178	≥ 80 MPa	≥ 80 MPa
E-Modulus EN ISO 178	≥ 9000 MPa	≥ 9000 MPa
Thermal properties		
Dimensional stability measured at elevated temperatures with moisture change EN 438-2, point 17	≤ 0.30 length ≤ 0.60 width	0.15 length 0.3 width
Co-efficiency of thermal expansion DIN 52328	1/K	20 x 10 ⁻⁶
Resistance to dry heat EN 438-2, point 16	4-5 [degree]	4-5 [degree]
Resistance to staining EN 438-2, point 26 (group 1-3)	4-5 [degree]	5 no visible changes, no blisters or cracks
Optical properties		
Light fastness EN 438-2, point 27	≥ 4 [level]	≥ 4 [level]
Surface resistance		10 ⁹ – 10 ¹² Ohm

^{*450} U for all Uni colors, 150 U for Punto decors

Surpasses all tests

In addition to chemical resistance, mechanical strength is key when it comes to creating highly durable, long-lasting lab surfaces. This is where Max Resistance2 comes into its own. Thanks to its innovative patented surface technology, Max Resistance2 offers a 25% higher impact and scratch resistance, and a 3 times higher abrasion resistance, when compared to EBC or Melamine Surfaces.

10 year warranty

Because of its superior performance, Max Resistance2 comes with a 10 year extended warranty

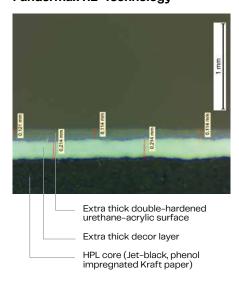


RE-technology

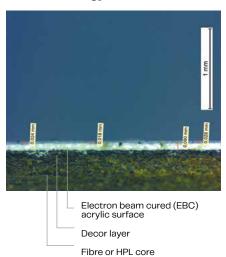
Exclusive 'RE-technology', developed in-house by Fundermax research scientists, is used in the production of Max Resistance2 – perfecting the finish and making it ultimately resistant on both sides. In contrast to surfaces manufactured by means of Electron Beam Curing (EBC) or Melamine technology, the Max Resistance2 work surface offers a significantly higher resistance to scratching, impact and abrasion, as well as aggressive acids. Max Resistance2 sets a new standard and considerably increases the life cycle of your laboratory work surface.



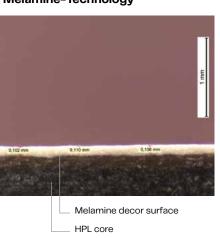
Fundermax RE-Technology



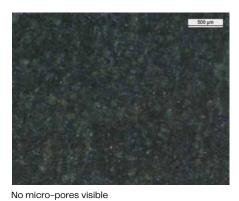
EBC-Technology



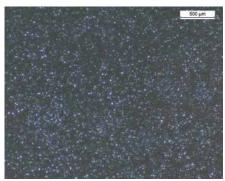
Melamine-Technology



RE-surface

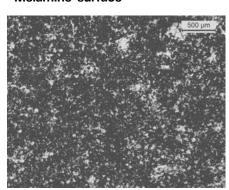


EBC-surface



Micro-pores visible

Melamine-surface



Pores visible



Perfect disinfectability

Because of its non-porous finish, Max Resistance² can be easily disinfected and doesn't support the growth of bacteria. As a result you can confidently disinfect, knowing that you will kill > 99.99% of germs. Following a deliberate contamination with the aggressive Staphylococcus Aureus and Escherichia Coli bacterias, and subsequent disinfection¹), it was proven that Max Resistance² was as effective as stainless steel when it comes to disinfection. These rigorous tests demonstrate the superior performance of Max Resistance2 and highlight its suitability for medical, bio-chemical, food and pharmaceutical sectors/laboratories. In a further test²), it was demonstrated that the surface of Max Resistance² is free of micro-pores. The comparison to other available surfaces shows that this is a truly unique feature.



1) The following disinfectants were used (in vol. %):
Ethanol 70%, Formalin 5%, p-Chloro-m-cresol 0.3%, Chloramine T 1%,
Chloramine T 5%, Alkyl Benzyl Dimethyl Ammonium Chloride 0.1%
2) Porosity check: application of chalk dust, subsequent cleaning and surface examination with microscope



Maximum performance

Max Resistance 2 not only meets the standards set by SEFA 3, it surpasses them; the harshest chemicals applied to horizontal lab surfaces have no impact whatsoever. The surface is resistant to Hydrofluoric Acid and Sulfuric Acid.

	Rating	О	1	2	3
Substance		No effect	Excellent	Good	Fair

F	Rating 0	1	2	3
Substance	No effec	Excellent	Good	Fair

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Organic Chemicals

Dimethylformamide Formaldehyde 37%

Hydrogen Peroxide 30% $^{2)}$

Sodium Sulfide Saturated

Hydrogen Peroxide 3%

Cresol

Furfural1) Gasoline

Phenol 90%

Solvents Acetone 2)

Benzene

Dioxane Diethyl Ether Ethyl Acetate 1) Ethyl Alcohol

Amyl Acetate

Butyl Alcohol

Carbon Tetrachloride Chloroform 2)

Dichloracetic Acid 2)

Methyl Alcohol

Napthalene Toluene Trichloroethylene

Xylene 1)

Methylene Chloride

Methyl Ethyl Ketone

Monochlorobenzene

Acids

Acetic Acid 99%	•			
Dichromate Acid 5% 2)	•			
Chromic Acid 60%	•			
Formic Acid 90% 2)	•			
Hydrochloric Acid 37%	•			
Hydrofluoric Acid 48%		•		
Nitric Acid 20%	•			
Nitric Acid 30%	•			
Nitric Acid 70% 2)			•	
Phosphoric Acid 85%	•			
Sulfuric Acid 33%	•			
Sulfuric Acid 77%	•			
Sulfuric Acid 96%		•		
Sulfuric Acid 77 % Nitric Acid 70% (1:1)			•	

Rases

Ammonium Hydroxide 28%	•		
Sodium Hydroxide 10%	•		
Sodium Hydroxide 20%	•		
Sodium Hydroxide 40%	•		
Sodium Hydroxide Flake	•		

Salts and Halogens

Saturated Zinc Chloride	•		
Saturated Silver Nitrate	•		
Tincture of Iodine 1)		•	

Test results may differ by color

1) Result on	0082
2) Result on	0085



- Rating O - No Effect - No detectable change in the material surface.
- 1 Excellent Slight detectable change in color or gloss but no change in function or life of the surface.
- 2 Good A clearly discernible change in color or gloss but no significant impairment of surface life or function.
- 3 Fair Objectionable change in appearance due to discoloration or etch, possibly resulting in deterioration of function over an extended period of time.

Acceptance criteria

To be approved as laboratory grade surfaces, tested materials should receive no more than four Level 3 ratings.

Test procedure

The chemical resistance tests were performed in a SEFA certified laboratory according to the Test Method: SEFA 3-2010 Sec 2.1. (24hr Exposure) Detailed information and results are available in the test reports.

Results

Max Resistance² passed the SEFA 24h Exposure Test and is therefore suitable and recommended for laboratory worktops. Max Resistance² exceeds the SEFA test criteria by far without one single Level 3 rating.





Max Compact Interior Plus The best laminate for superior interior finishes

Max Compact IP are high pressure laminates (HPL) manufactured to standard EN 438-4 Type CGS for demanding applications (e. g. office furniture, wall cladding, wet rooms, etc.) with a double-hardened, pore-free surface sealed with urethane acrylate for applications in heavily frequented areas with higher cleaning or hygiene requirements, such as in hospitals, schools, kindergartens, sanitary rooms in hotels and in public areas or buildings with occasionally increased risk of infection (airports, train stations), industrial kitchens and public transport.

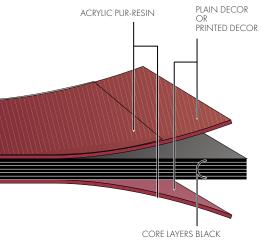
Even especially at largely frequented rooms the Max Compact Laminates pays off. Because pollution and graffiti are removed free of residues. Test series approve: Max Compact Interior Plus has excellent disinfecting and hygienic properties. Even aggressive cleaners are unable to harm it. Due to the double hardened closed surface of Interior Plus, it shows a stand alone resistance against environmental influence.

Disinfectant properties

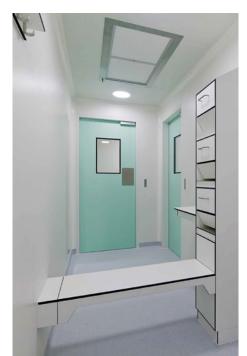
Due to its outstandingly surface Max Compact Panels Interior Plus are easy to clean and easy to disinfect also, like e.g. stainless steel or operating room tiles.

Cleaning

Max Compact panels not only score with their decorative properties. Reduced cleaning expenses help saving costs and Max Compact panels look brand-new again even after heavy contamination.









Applications

- hospitals, nursing homes
- areas with high hygienic demands
- school buildings, kindergarten
- public swimming baths, sauna
- sanitary rooms in hotels and in the public
- buildings with occasionally higher infection risk (airports, railway stations)
- canteen kitchens, foodstuff industry
- public traffic

Practically all areas where aggressive or acid cleaners (eg. cleaning agents, descalier) are used often for cleaning and where a durable hygienic dense surface is required.

Advantages of interior plus

- dense surface
- easy to disinfect
- durable
- stable
- easy to clean
- easy to clean from limescale
- highly resistant
- many formats
- many decors

PHYSICAL DATA	TEST METHOD	ACTUAL VALUE
Density	EN 438	\geq 1,35 g/cm ³
OPTICAL PROPERTIES	TEST METHOD	ACTUAL VALUE
Light-fastness (Greyscale)	EN 438	≥ 4
Water vapour diffusion resistance	EN 438	≥ 4
MECHANICAL PROPERTIES	TEST METHOD	ACTUAL VALUE
Flexural strength	EN 438	≥ 80 MPa
Modulus of elasticity	EN 438	≥ 9000 MPa
Fire behaviour	EN 13501-1	D-s2, d0; on request in F-Quality B-s2, d0
Scratch resistance		degree ≥ 3 ≥ 4 N
Chemical resistance		not depending on colour (24h Test) All solvents Hydrochloric acid 10% Phosphoric acid 10% Acetic 10% Sodium hypochlorite 13% Soda lye 25% Ammonia 25%





Wood walls and ceilings for interiors

The beauty of natural wood, without specific maintenance

Parklex Prodema has proprietary resin-based technology to protect the wood from Day 1, making it appropriate for continued use. No other maintenance (such as sanding, lacquering, oiling etc.) other than simple cleaning is ever required.

Reaction to fire

NATURPANEL-W and NATURHARDPANEL-W have achieved the highest level of test results for organic materials, as per the stringent requirements of European Standard EN 13.501-1, reaction to fire: NATURHARDPANEL-W: B-s 1,d0

NATURPANEL-W: B-s2,d0

Resistance to scratching

All products within our wall and ceiling range achieved Level 3 for scratch-resistance, according to standard EN 438-2 section 25.

Light fastness

A minimum of Level ≥ 2 in the greyscale was achieved by all wall and ceiling products, as per the requirements of EN 438-2 section 27.

Antibacterial

The entire range of wall and ceiling products can be supplied with high level antibacterial characteristics (based on standard ISO 22196:2007), upon request.

Sound absorption

Our natural wood coverings can be adapted for use in areas requiring specific sound absorption characteristics. Tests conducted to measure sound absorption in a reverberation chamber obtained weighted coefficient between 0.2 and 0.6, depending on the perforation detail.



Maintenance-free



Sustainable



Scratch and impact resistant and light fastness



Moisture resistant



Fire performance B-S1,D0 C-S1,D0





NATURPANEL-W and NATURHARDPANEL-W boards

Were specifically designed for internal wall and ceiling installations, where the wood offers the unique warmth, tone and grain of a living, organic material.

NATURPANEL-W

Highly resistant and tough, NATURPANEL-W is the premier natural wood cladding for internal walls and ceilings. Specifically designed for areas subject to high levels of abrasion. Zero maintenance, apart from washing. Wall



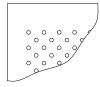
A - Natural processed wood veneer

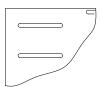
B - Beech plywood (NATURPANEL-W S1) Poplar plywood (NATURPANEL-W F2)

C - Rear Bakelite balancer

Our boards can be adapted for projects that require specific sound absorption characteristics, such as convention halls, auditoriums, lecture halls and theatres.











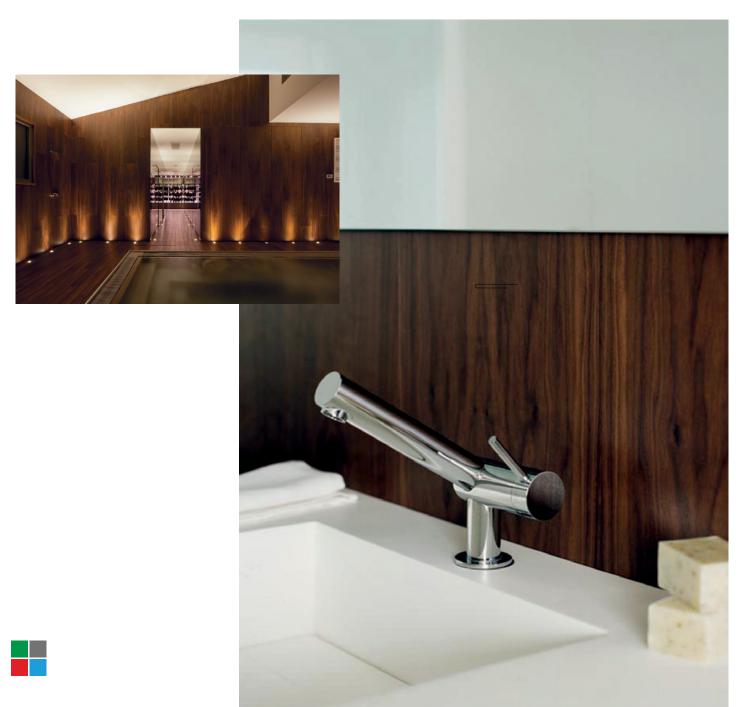


NATURHARDPANEL-W

Thanks to the technical leak-tightness and damp-resistant properties of the natural wood's veneer, NATURHARDPANEL-V gives a special feeling of warmth in indoor environments that are frequently in contact with water



- A Damp-resistant layer
- B Natural wood veneer
- C HPL core
- D Protective film on rear



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Fundermax PARKLEX PRODEMA





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