CSi Canadian Scientific

The Future of Laboratory Design

Phenolic Surfaces

PRODUCT CACTALOGUE

IN ASSOCIATION WITH Fundermax

ABOUT US

Canadian Scientific

At Canadian Scientific Lab Systems, we specialize in the design, supply, and installation of cutting-edge laboratory equipment. We provide customized solutions that meet the highest industry standards for safety, durability, and performance.

Our expert team works closely with architects, engineers, contractors, administrators, and end users to ensure a seamless, efficient process from start to finish. We take the time to understand your unique needs, proactively addressing challenges with clear communication and swift resolutions to keep projects on track.

Fundermax

From furniture and facades to interior design, Fundermax is at the interface of ideas and materials. Today the company – which has a proud history spanning 130 years – stands as a global market leader and producer of high quality materials using wood and laminates.

Our lasting success has been based on high quality, imaginative design, diversity and sustainable production. Our products exude a love for the natural resources of wood, creativity and inventiveness.

With a local presence and national reach, Canadian Scientific Lab Systems delivers unmatched support, innovation, and expertise, helping you optimize your laboratory space with confidence.

PRODUCT INFORMATION

Canadian Scientific offers a variety of phenolic surface solutions for your projects, whether it is for laboratories, hospitals, cleanrooms, furniture or fume-hoods.

Max 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 stand the test of time.

Max Resistance² not only fulfils the requirements of the SEFA3 standard for chemical resistance of horizontal laboratory surfaces - it clearly exceeds them.

SUSTAINABLE PRODUCT DESIGN

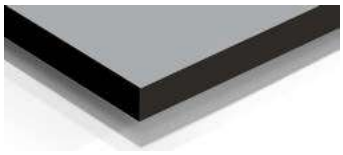
Reap the benefits of a high-performance solution without compromising sustainability. Learn more on page 14.

PRODUCT INFORMATION

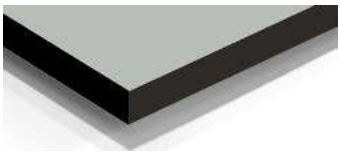
Max Resistance² — WITH BLACK CORE

With its deep black core and double-sided resistant decor, you can maximize your design and reduce waste during fabrication. Extra high resin content and careful manufacturing results in a consistent depth of colour, removing the need for edge treatment.

0082 Deep Black

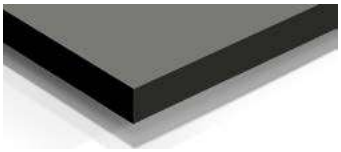


0753 Cool Grey Medium



0074 Pastel Grey

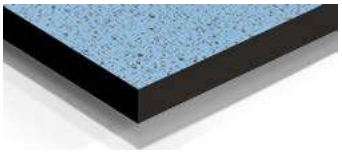
0558 White Punto



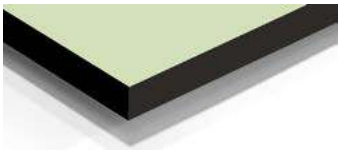
2181 Volcano Grey

0606 Arctic White

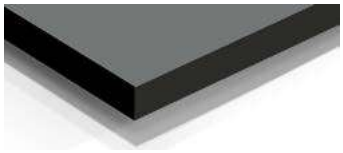
0077 Charcoal



3361 Punto Arctic

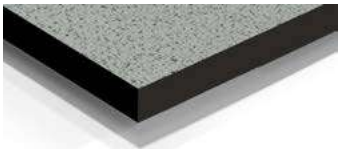


0592 Kiwi Green



0075 Dark Grey

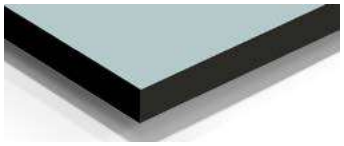
0851 Winter White



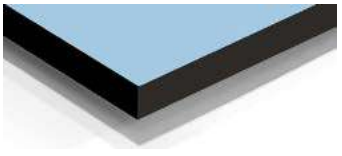
0559 Pastel Grey Punto

0741 Birch Grey

0085 White



0706 Glacier Blue



0718 Arctic

Note: Colour variations from the original decors are caused by the technical limitations of the printing process. Please request an original sample.

PRODUCT INFORMATION

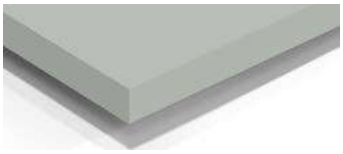
Max Resistance² — WITH COLOUR CORE

We also offer four colour-through core options, allowing edge reveals to exactly match the surface decor. Additionally, all 16 surface decors are available made-to-order on all colour-through-core colours, resulting in 80-colour combinations available ‘for you to create!’

Design-oriented projects, surfaces, colours and textures can be coordinated with Fundermax’s extensive product range - ensuring a unique and contemporary design.

0085 White
(with colour through core)

0077 Charcoal
(with colour through core)



0074 Pastel Grey
(with colour through core)

2181 Volcano Grey
(with colour through core)

PRODUCT INFORMATION

POPULAR THICKNESSES

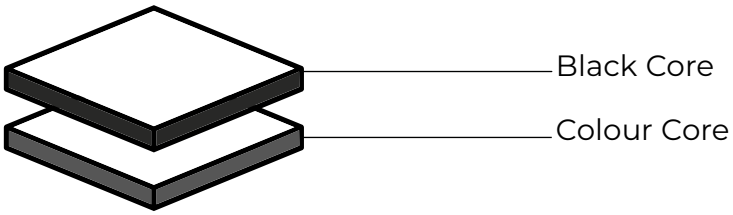
Popular thickness shown; black core available in 4-25mm, colour-through-core is available in 11-25mm.

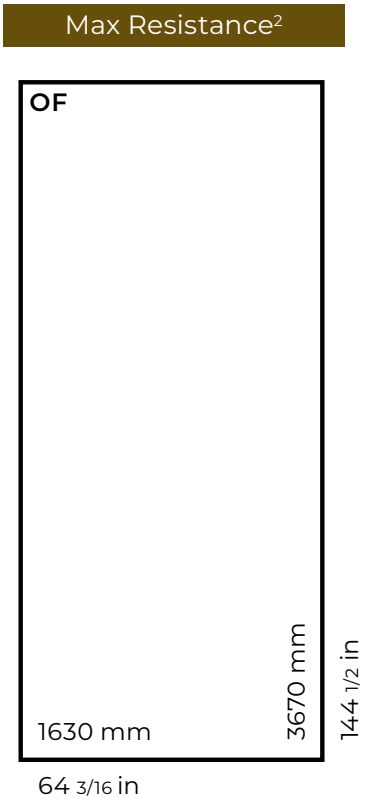
Max Resistance²		
OF	3670 x 1630	6 / 13 / 16 / 19 / 20 / 25 mm

Format		
OF	3670 x 1630mm	144-1/2 x 64-3/16 in

Max Resistance² — CORE COLOURS

Max Resistance² Popular thickness shown; black core available in 4-25mm, colour-through-core is available in 11-25mm.



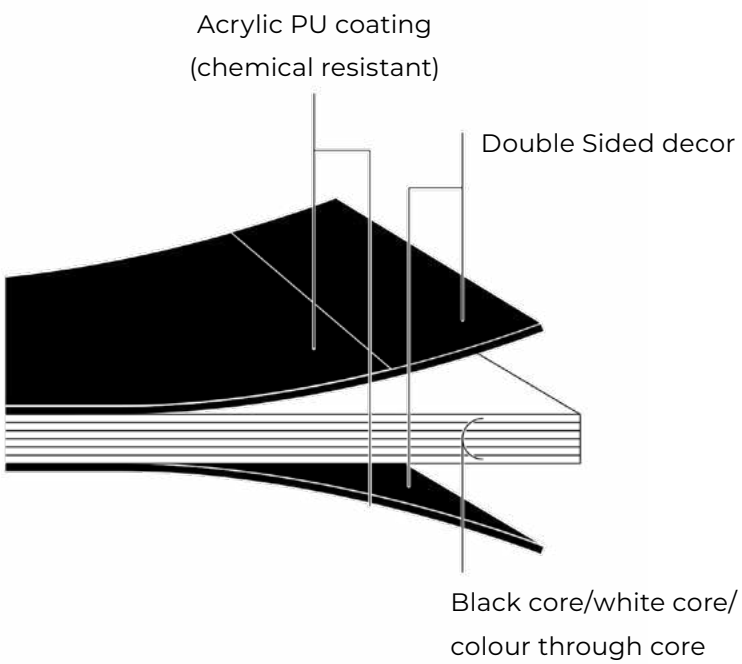


PRODUCT INFORMATION

Max Resistance² — SURFACES & DECORS

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.

STRUCTURE



100% Sustainable Core Paper

Our products are created with a sustainable design and by using recycled wood and recycled paper, we use and reuse natural resources for as long aspossible.

Kraft paper is produced from 100% recycled paper, which is used in our Max Compact Interior panels.

Perfectly Balanced Panel

Our double-sided decor surfaces are identical on both sides of the panel to eliminate warpage. This allows installers to use either side of the panel as the exposed surface.

PRODUCT INFORMATION

Max Resistance² — A CUT ABOVE THE REST

- moisture resistant
- food grade
- durable
- excellent chemical resistance
- anti-static
- excellent machinability
- heat resistant up to 180°C/360°F
- resistant to thermal-shock
- easy to clean
- impact resistant
- perfectly disinfectable
- double sided
- ease of installation
- scratch resistant

Surpasses all tests

In addition to chemical resistance, mechanical strength is key when it comes to creating highly durable, long-lasting lab surfaces. 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.

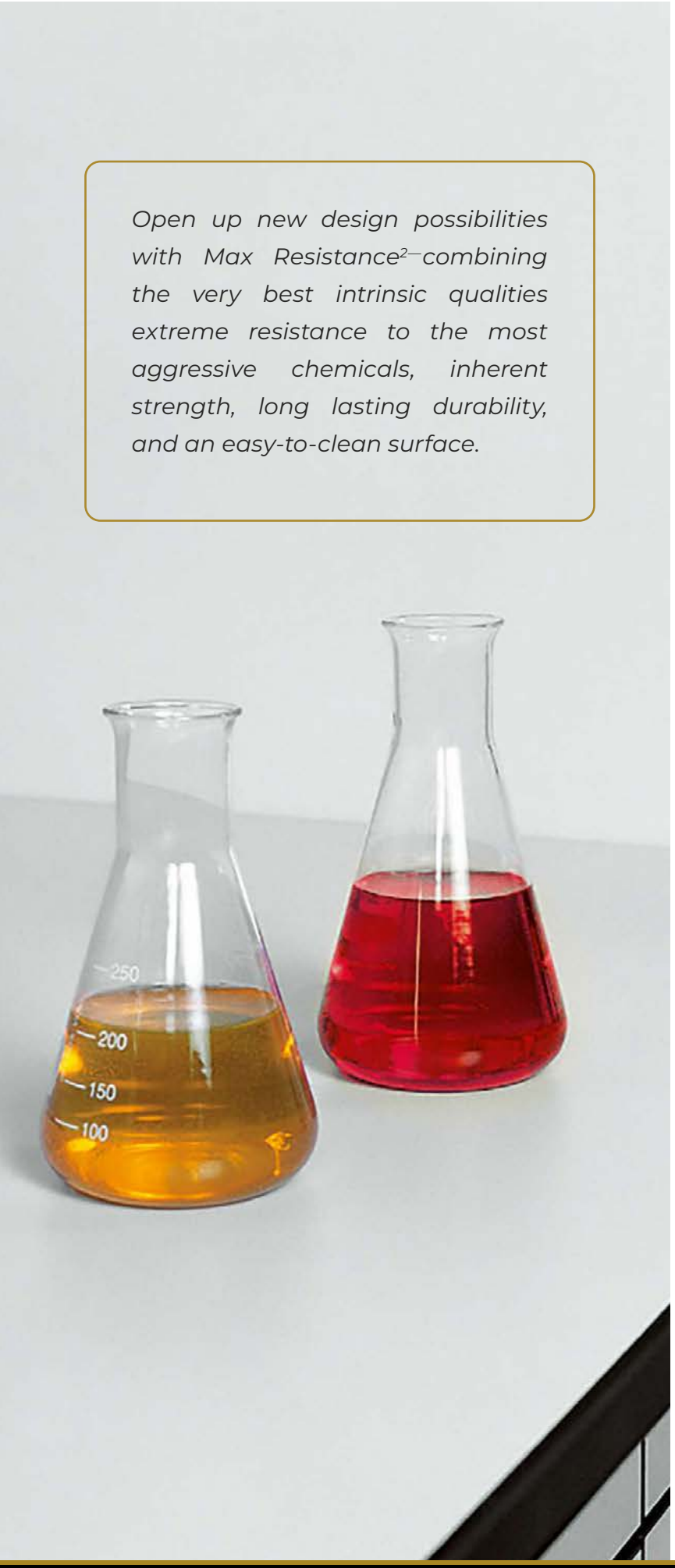
Sustainable

Thanks to its exceptional longevity, Max Resistance² reduces the need for frequent replacement and thus minimizes the consumption of resources. With a service life that far exceeds the industry standard, Max Resistance² helps to reduce the ecological footprint and supports a sustainable working environment in the laboratory.

10 Year Warranty

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

Open up new design possibilities with Max 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.



Permanently resistant

Max Resistance² 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 durable panel. As it is completely uniform and non-porous, it's also permanently resistant to moisture.

For extreme demands

With excellent physical properties, coupled with its ability to resist both harsh chemicals and acids that are used on open benches across all industry sectors, including, but not limited to, laboratories within: Colleges & Universities; Pharma and Biotech; Government; K-12; Clinical Research and Diagnostics; Contract Research and Contract Manufacturing Organizations (CRO & CMO); Hospitals, as well as other sectors, such as petrochemical & food industries.

Black core is Class A fire-rated at 13mm and above.

Safe and simple installation Max Resistance² contains zero silica for safe machining on the jobsite without additional PPE. Standard carbide blades and bits are acceptable. Consistent thickness across all panels, along with dimensional stability and anti-warp characteristics, makes installing and seaming panels fast and easy.

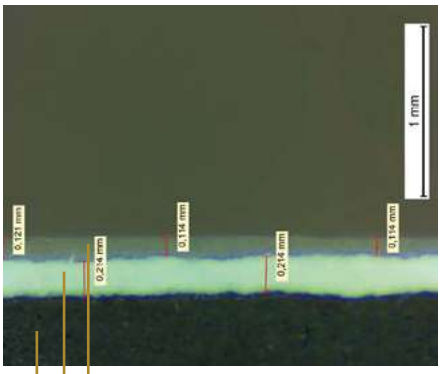
PRODUCT INFORMATION

Max Resistance² — PATENTED SURFACE TECHNOLOGY

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 disinfectants and aggressive acids. Max Resistance² sets a new standard and considerably increases the life cycle of your laboratory work surface.

Fundermax RE-Technology

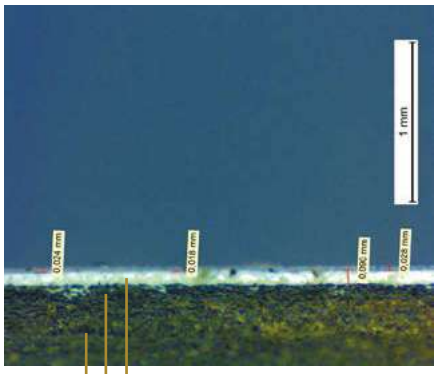


Extra thick double-hardened urethane-acrylic surface

Extra thick decor layer

HPL core (Jet-black, phenol impregnated Kraft paper)

EBC-Technology

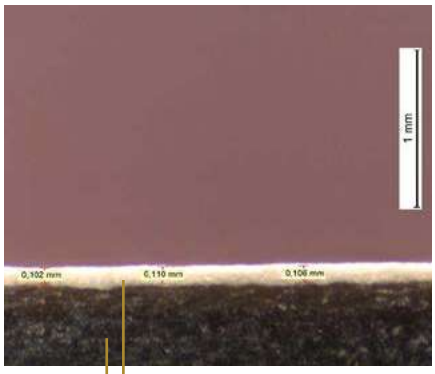


Electron beam cured (EBC) acrylic surface

Decor layer Fibre

or HPL core

Melamine-Technology



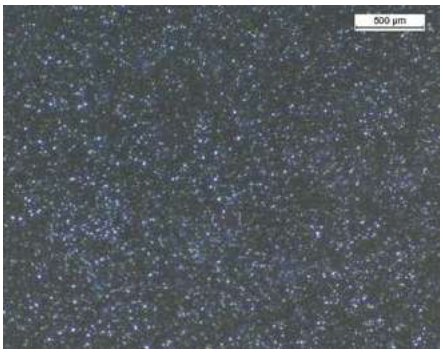
Melamine decor surface

HPL core

RE-surface

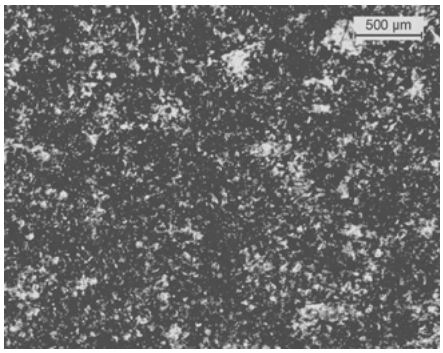
No micro-pores visible

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. Even the use of common disinfectants, such as bleach or hydrogen peroxide mist, do not effect the surface.

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 is 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 laboratories.

In a further test2) , it was demonstrated that the surface of Max Resistance² is free of micro-pores, making it a truly unique product.

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

ADVANTAGES

Bacterial growth is prevented

Durable surface

Excellent cleanability

No surface discoloration

PRODUCT INFORMATION

Max Resistance² — OUTSTANDING MECHANICAL AND THERMAL PROPERTIES

Properties tested according to EN 438	Standard requirement	Max Resistance²
Physical data		
Density DIN 52350/ISO 1183	≥ 1.35 g/cm_3 (=0.049 lb/$inch_3$)	≥ 1.35 g/cm_3 (=0.049 lb/$inch_3$)
Thickness (e.g.) EN 438-2, point 5		10 mm (=0.39”)
Weight		13.5 kg/m_2 (=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}0hm

*450 U for all Uni colors, 150 U for Punto decors

Sustainable PRODUCT DESIGN

Fundermax holds the following ISO certifications:

- **ISO 9001** - meeting/exceeding customer expectations
- **ISO 14001** - demonstrates practices to reduce environmental impact
- **ISO 50001** - for organizations committed to addressing their impact, conserving resources and improving the bottom line through eficient energy management
- **ISO 45001** - aims to ensure “people are safer and healthier” at work

100% of transport to our production sites is by train or boat

100% of electricity is hydroelectric

100% of raw material is recycled cardboard

100% of production waste is recycled into paper

Natural Materials

Fundermax panels are primarily made from ‘byproduct’ wood, produced in saw mills and from logging, which is then processed into ‘kraft paper’. Fundermax procures these raw materials from suppliers who hold FSC® or PEFC™ certification. These standards confirm that all logging is carried out in accordance with international rules for sustainable forestry.

Environmentally friendly production

During the manufacture of Fundermax Compact panels, kraft paper is impregnated with resin, dried and compressed at high pressure – producing highly durable and moisture resistant panels. The waste from this process is treated (by regenerative thermal oxidation) and then re-used, achieving an entirely closed production cycle.

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