PaperStone®

The Earth's Surface™

REDESIGNING OUR FUTURE

The PaperStone® vision is the result of deep reflection and thoughts that we would like to share with you. 'It is still possible to change the way we think and work, above all redesigning our future.' We believe this is truly possible.

We believe it is possible to achieve what as long been called NATURAL CAPITALISM.
A type of capitalism, which in truth, has very different a nd d ivergent o bjectives t o those promoted and supported by todays' traditional economic systems.

Natural capitalism takes account of resources, focusing on efficiency to pr oduce more with less.
It is re-drafting industrial models which exclude the principles of waste and therefore the production of waste, moving the economy toward the continual flow of v alue and services while investing in the protection and expansion of the existing natural capital asset.

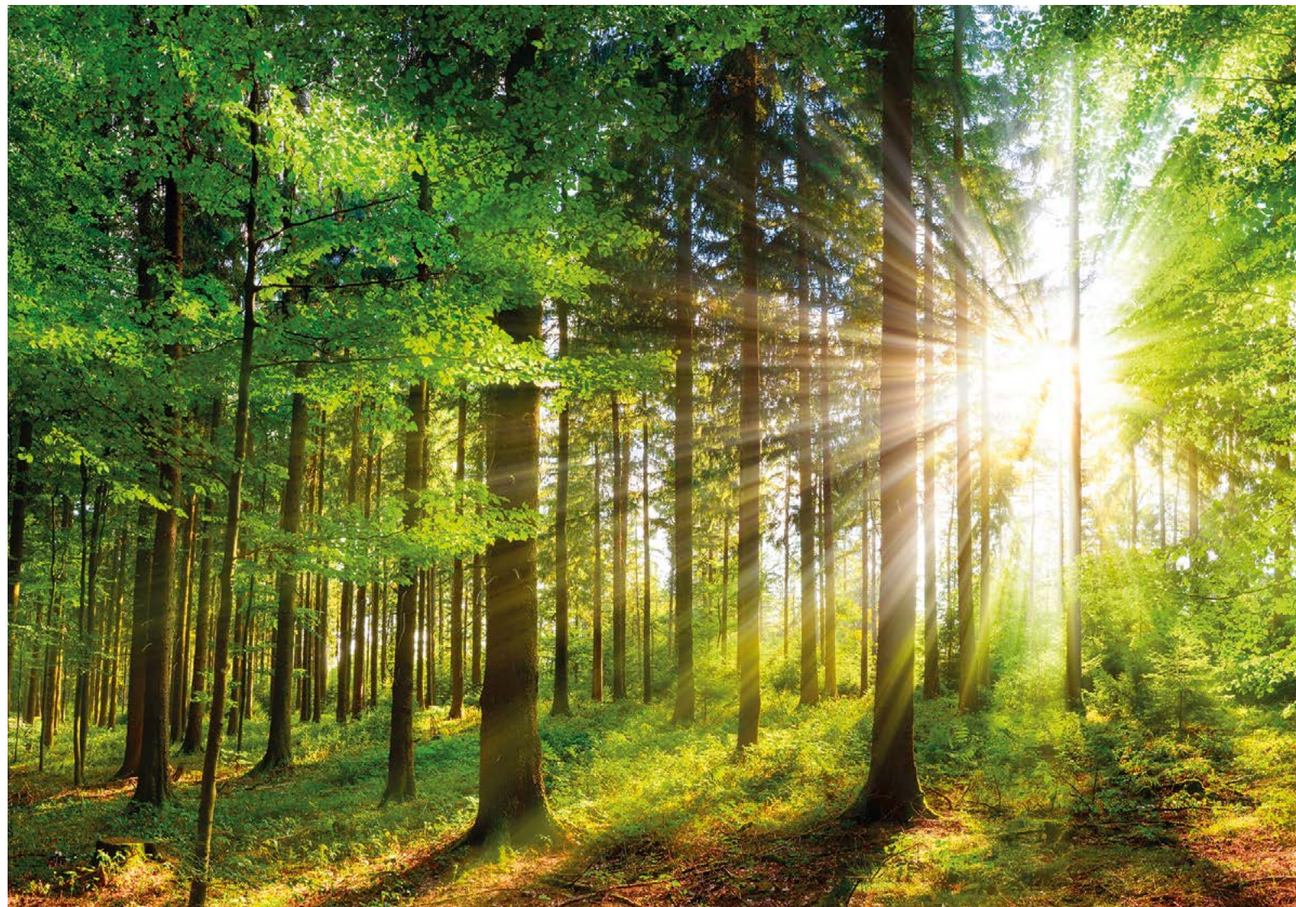
It is our belief this is not only possible but also necessary. We live, perhaps for the first time in human history, where an entire generation of individuals are called to make decisions and undertake commitments that will have significant and long-lasting consequences on all that will follow.
If you share our belief and commitment and believe they may be part of your future business projects, please let us know and we will be very happy to share our views with you.

PaperStone® is not just a new generation of environmentally products, PaperStone® is much more.
PaperStone® is a new culture and a new way of understanding and designing new surfaces for interior architecture.

PaperStone® is very committed to the protection and conservation of the global environment.

This is illustrated by the strict certifications that the product qualifies for as well as being memebers of organizations that share a similar belief. Below are a few of them.

REDUCE
REUSE
RECYCLE



PaperStone®

What is it?

PaperStone® is the new generation ecological material produced with recycled and certified FSC® paper, impregnated with a resin called PetroFree™ in that it does not contain compounds derived from petroleum. The result is both a high performance product and respects the environment.
In the production cycle, only strictly selected and controlled raw materials are used, from the paper to the resin, which is why PaperStone® e boasts more restrictive certification in terms of the environment. Any excess derived from the production cycle is recycled or re-used; which allows for the non-generation of any waste or pollutants, which are harmful to the environment or human health. PaperStone® represents thus the natural and responsible choice.

100% Recycled*

PaperStone® is produced using FSC®-certified recycled paper and cardboard impregnated with a resin called PetroFree™.

Environmentally friendly and non-toxic

PaperStone® by its very nature is a material free of toxic substances which, thanks to its warm and natural colours, fi ts in well with the environment, respecting nature, even with the holistic view of our living spaces.

Hygienic

PaperStone® is a non-porous material, compact and homogeneous throughout its thickness. In addition, its surface is particularly sought after for use in public places as it does not facilitate the growth of mold and bacteria.

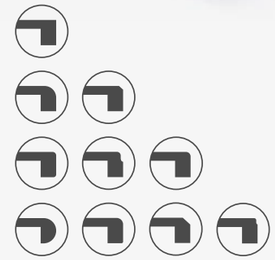
*Leather is not recycled.

ADDITIONAL BENEFITS OF PaperStone®

It can easily be milled and drilled for the use of mechanical fasteners; has rigidity and structural strength in both horizontal and vertical applications.

Its flexibility in machining ensures edges and profiles can be created using traditional woodworking tools. Joints can be created effectively, fitting together seamlessly and almost invisibly.

The easy of installation makes PaperStone® a natural choice.
The PaperStone® price range is comparable to the best "solid surfaces", or high quality granites. The ease with which PaperStone® can be machined and finished will allow for savings to be made on labour costs, reducing the installation price. To enhance the beauty of PaperStone®, we recommend the application of The Osmo® Top Oil to the surface.



Examples of built-in edge profiles

PaperStone® FOR PUBLIC TOILETS

RESISTANCE AND DESIGN FLEXIBILITY

The features and production fl exibility of PaperStone® provides professionals and architects with limitless possibilities for its use. A prime example is the use of the product in public areas as toilet stall separators with typically built suspended doors.

PaperStone® is the epitome of this new culture paradigm. The product is manufactured only from environmentally sustainable and recycled materials such as paper and FSC® certified cardboard and resin called PetroFree™ as it is a non-petroleum derivative unlike more traditional resins.

PaperStone® is not affected by prolonged use in humid environments and therefore its application in these environments is recommended. Independent laboratory tests, confirmed an impact resistance of up to 10.000kg, without any sign of damage.

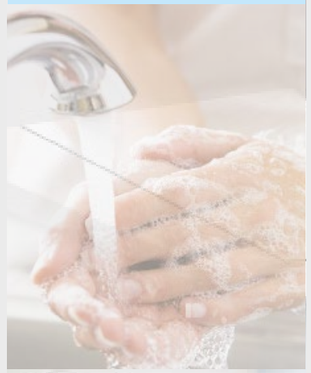
This makes PaperStone® the ideal product for use in environments that are at a high risk of vandalism.

NOT JUST MOISTURE RESISTANT.

PaperStone® is not only a beautiful natural material, it is also technologically advanced.

The qualities of PaperStone® are best revealed when used in applications where high performance is essential.

PaperStone® is the natural choice when designing sanitation services and partition walls in public areas where resistance to moisture and high impact resulting from acts of vandalism are essential requirements.



TOILETTE PARTITIONS & COUNTERTOPS

1 *Public toilets countertop in PaperStone® Cabernet*

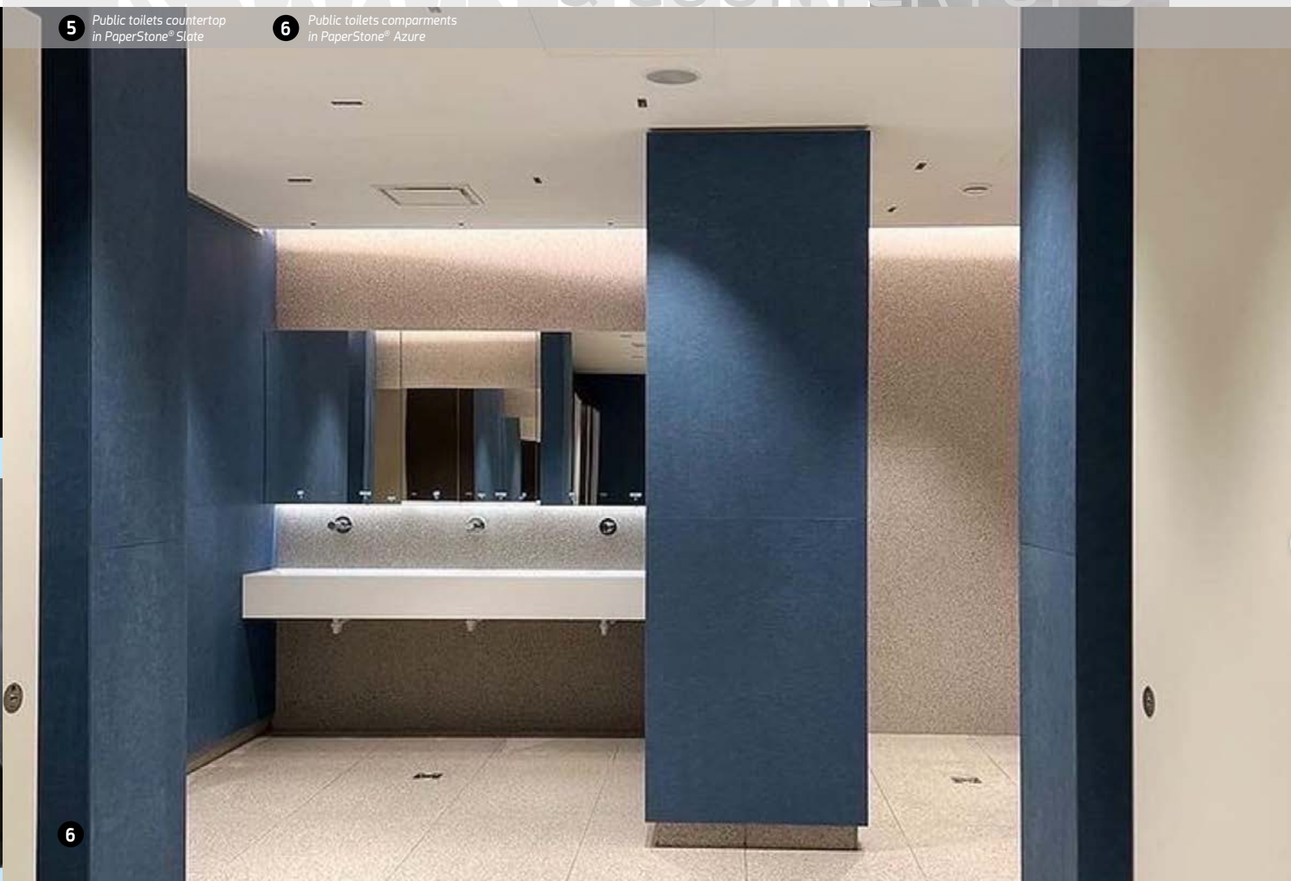
2 *Public toilets comparments in PaperStone® Leather*

3 *Public toilets parts in PaperStone® Honey*

4 *Public toilets comparments in PaperStone® Graphite*

5 *Public toilets countertop in PaperStone® Slate*

6 *Public toilets comparments in PaperStone® Azure*



Cabernet

Gunmetal

Chocolate

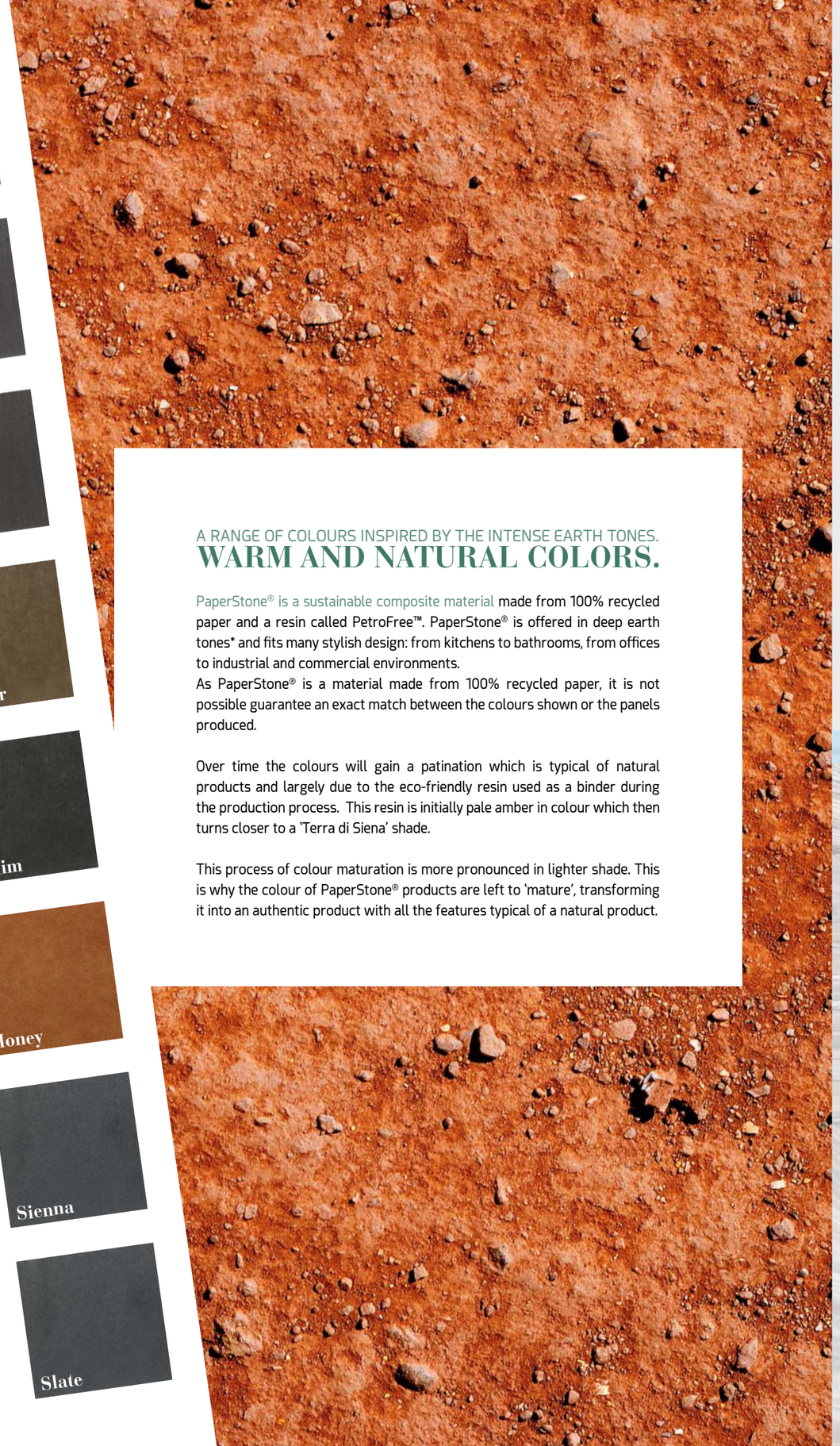
Leather

Denim

Honey

Sienna

Slate



A RANGE OF COLOURS INSPIRED BY THE INTENSE EARTH TONES.

WARM AND NATURAL COLORS.

PaperStone® is a sustainable composite material made from 100% recycled paper and a resin called PetroFree™. PaperStone® is offered in deep earth tones* and fits many stylish design: from kitchens to bathrooms, from offices to industrial and commercial environments.
As PaperStone® is a material made from 100% recycled paper, it is not possible guarantee an exact match between the colours shown or the panels produced.

Over time the colours will gain a patination which is typical of natural products and largely due to the eco-friendly resin used as a binder during the production process. This resin is initially pale amber in colour which then turns closer to a 'Terra di Siena' shade.

This process of colour maturation is more pronounced in lighter shade. This is why the colour of PaperStone® products are left to 'mature', transforming it into an authentic product with all the features typical of a natural product.

PaperStone®
FSC® Design Collection

Sand

Pewter

Graphite

Azure

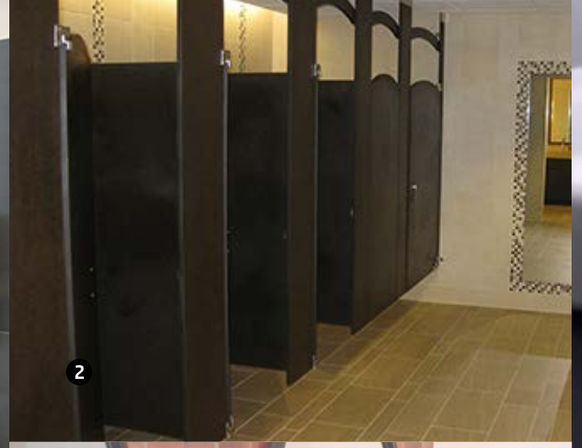
Charcoal

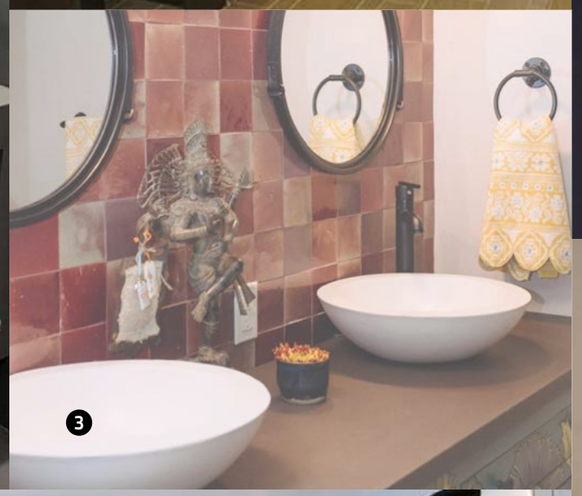
PaperStone® DESIGN COLLECTION

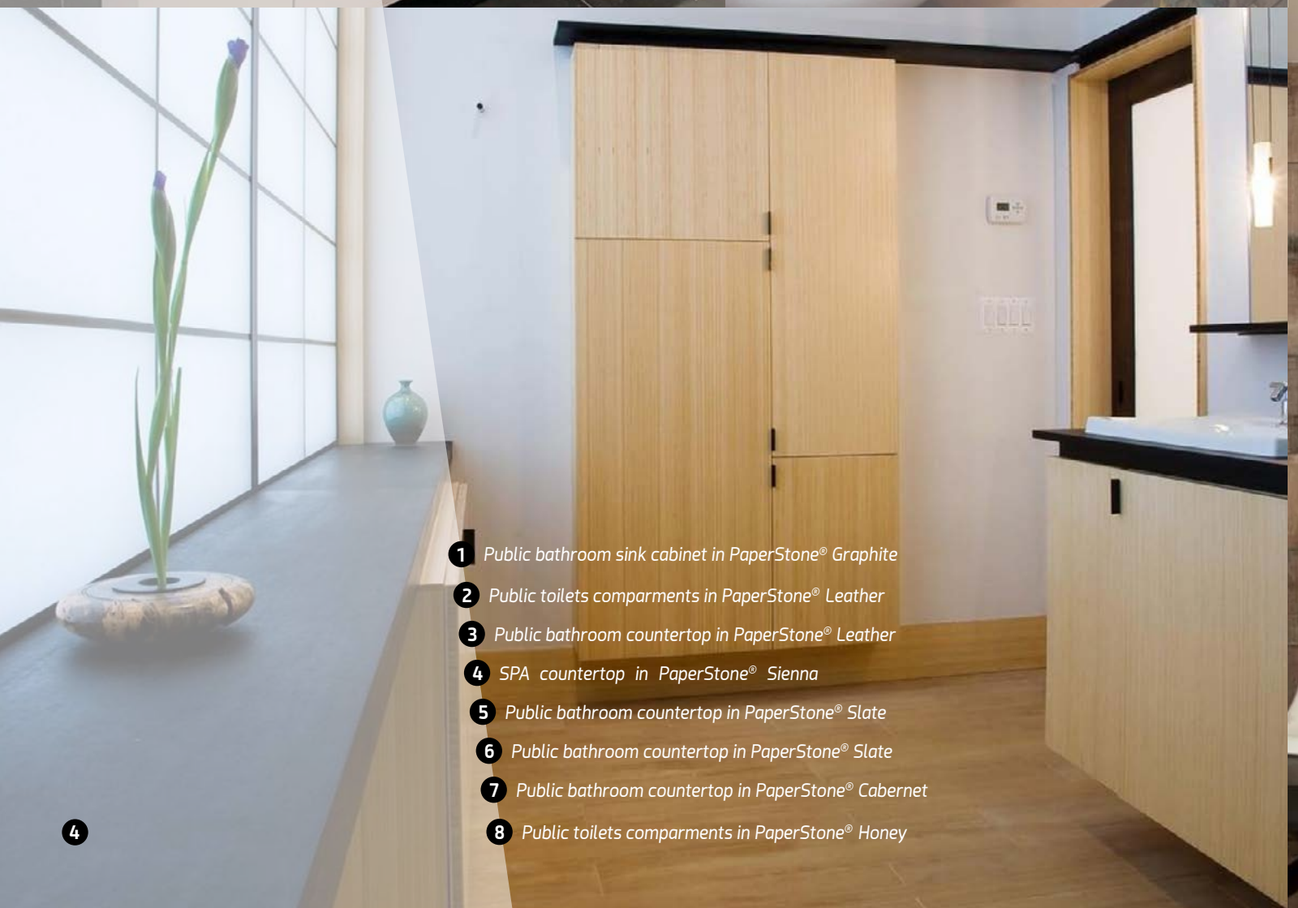
Design Collection is a new range of lighter shades*.
Not available in the other Collections.
As with the entire PaperStone® range, it maintains its environmentally friendly features and is also FSC® certified.

The Design Collection is differentiated from the main PaperStone® by its distinctive striped effect at the edges and it is not a homogeneous colour throughout the thickness of the panel.

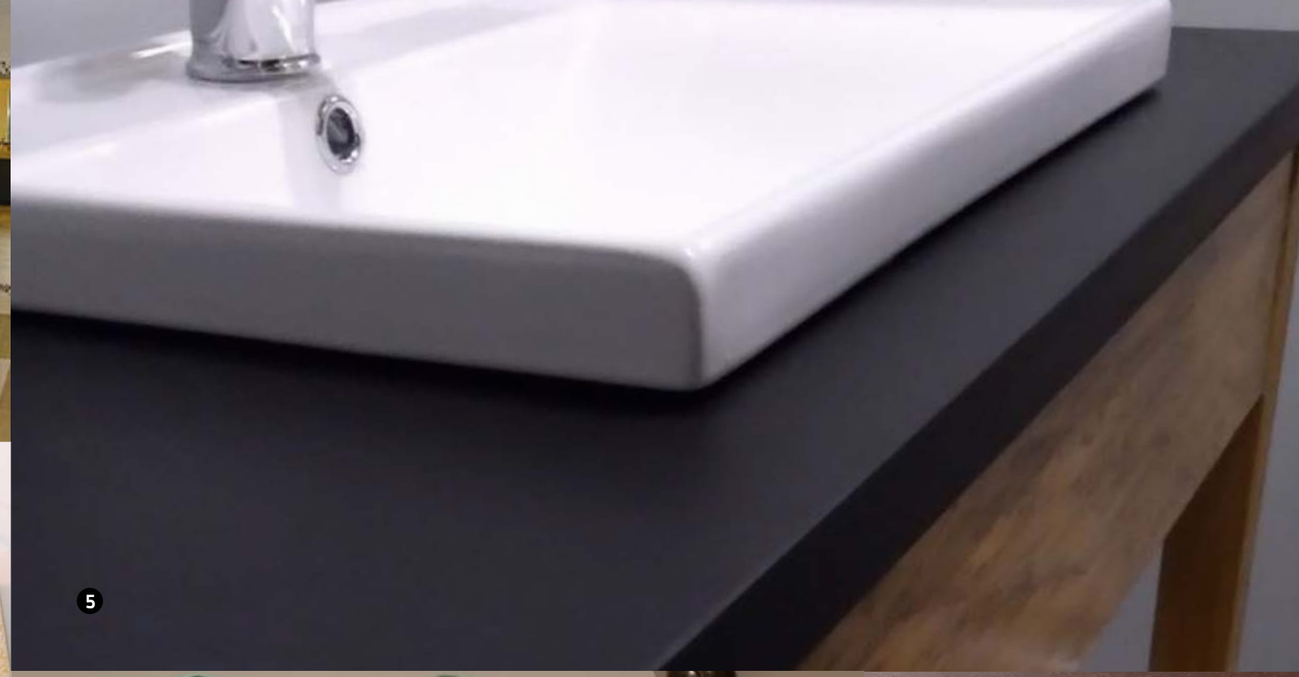
* THE HUE OF THE ALL COLOURS SHOWN HERE MAY VARY FROM THE ORIGINAL MATERIAL







1. *Public bathroom sink cabinet in PaperStone® Graphite*
2. *Public toilets comparments in PaperStone® Leather*
3. *Public bathroom countertop in PaperStone® Leather*
4. *SPA countertop in PaperStone® Sienna*
5. *Public bathroom countertop in PaperStone® Slate*
6. *Public bathroom countertop in PaperStone® Slate*
7. *Public bathroom countertop in PaperStone® Cabernet*
8. *Public toilets comparments in PaperStone® Honey*



PaperStone®

FEATURES

WATERPROOF RESISTANT

PaperStone® counter-tops and sinks are water resistant and practically impermeable, maintaining their original features and avoiding surface deterioration.

STAIN RESISTANT*

PaperStone® surfaces are easy to clean and maintain. PaperStone® is treated using non-acidic cleansing products and a microfibre cloth to clean surfaces, to maintain its new appearance for many years to come; for a strain proof relaxed environment.

SCRATCH RESISTANT

The surface has a high level of resistance to maltreatment, and in the case of superficial scratches, as it is a coloured material throughout, it allows the damaged surface to be sanded and easily restored.

IMPACT RESISTANT

PaperStone® withstands impacts up to 20,000 lbs without incurring any perceptible or visible damage.

HEAVY USE AREAS RESISTANT

PaperStone® is used in the production of furniture and furnishings with good resistance to accidental scratches and abrasions that occur typically in areas of heavy use. It does not flake and stands up well to the stresses caused by everyday use as well as high temperatures. PaperStone® has a heat rating of 180 degrees Celsius.

CIGARETTE RESISTANCE

In laboratory tests conducted, PaperStone® proved to have excellent resistance to cigarette burns.

HYGENIC

PaperStone® is a very dense, non-porous material , which can be installed often without seams. Occasionally seams are necessary but are very inconspicuous.
PaperStone® surfaces do not facilitate the proliferation of fungi and bacteria. PaperStone® also NSF® and European standard CE 1935 certified as safe for direct food contact when used as a food preparation surface.

WEIGHT RESISTANT

The surface is highly resistant to torsion. PaperStone® is a solid and very rigid structure, whether used as a supporting element of a structure or as a suspended separator panel in public toilets.

* Treated with OSMO® TOP OIL

FIREPROOF

Approved as fireproof to Class A.

SANDABLE & REPAIRABLE

Osmo® Oil 420

PaperStone® can be not only repaired but also easily cleaned and maintained beautifully overtime thanks to the use of Osmo® Oil 420 that delivers to the PaperStone® surface its warm and natural appearance while giving it a protection that facilitates cleaning and the hygiene necessary for a countertop intentended for the food preparation.
Damages caused by improper use can however be easily repaired directly on site. In extreme cases, it is always possible to perform a total restoration of the surface.

NON-TOXIC

PaperStone® is an extremely eco-friendly material which is non-toxic and VOC free (Volatic Organic Compounds). Thanks to these features, it is used in some quite demanding appli-cations such as large work surfaces in hospitals and chemical laboratories.

COLORED THROUGHOUT (SOLID COLOR RANGE)

PaperStone® is a solid surface composite with which the color is not a surface treatment. The colour runs throughout the entire depth of the product.

JOINTS VIRTUALLY INVISIBLE

Because PaperStone® can be seamed together quite inconspicuously, larger designs can be accomplished.
This seaming process allows the product to be installed and seamed on-site fairly quickly. The product can also be made to appear thicker once installed by adding a performing a "built-up edge". This can minimize the cost of the material, while simulating the look of a thicker top.

WORK LIKE WOOD

PaperStone® can be worked like wood similarly as wood, using many of the same tools/methods. The authorized fabricators that work with PaperStone® are for the most part experienced wood workers whom are well equipped to do so.

WARM NATURAL COLOURS

ThePaperStone® colours provide a natural harmony typical of materials found in nature to the rooms it is installed in. This is the result of a surface designed and produ-ced using only natural products such as recycled paper and cardboard impregnated with natural resins.

ENVIRONMENTALLY FRIENDLY

PaperStone® is possibly one of the most environmentally friendly surfaces in the world for furniture, furni-shings, and interior architecture. We suggest that you request documentation about it and we'll be glad to talk with you regarding this important feature of PaperStone®

TECHNICAL FEATURES

PROPERTY	METHOD	RESULTS
Specific gravity density	1,328 gr / cm^3	pycnomete UNI ISO 1183 - 1
Release formaldehyde	1 mgHCNO / (m^2h)	EN 717 - 2 : 1994
Pullout strength of the screw to 90 ° from the surface	323 N/mm	EN 320 : 11993
Thickness variation after 1 hour in boiling	0,00 %	EN ISO 62 / 99 met.2
Thickness change after 24 hours in boiling	0,00 %	EN ISO 62 : 2001 met.1
Compressive strength	131,1 Mpa	EN ISO 604 : 1996
TENSILE STRENGTH		
Breaking load of	13.819 N	EN ISO 527 : 1996
Tensile Strength	71 Mpa	EN ISO 527 : 1996
Modulus of elasticity	7.467 Mpa	EN ISO 527 : 1996
Elongation at maximum	1,2 %	EN ISO 527 : 1996
BENDING RESISTANCE		
Flexural strength	114,5 Mpa	EN ISO 178 : 2003
Modulus of elasticity of	8.888 Mpa	EN ISO 178 : 2003
Resistance to impact by small diameter sphere	> 80 N no fingerprints	EN 438 - 2 : 2005, par 20
Resistance to impact by large diameter sphere	h 1600 N no fingerprints	EN 438 - 2 : 2005, par 21
Light fastness	> 6	EN 438 - 2 : 2005, par 27
Shore D hardness method	91°	EN ISO 868 : 2003
Brinell hardness method	-	EN EN 1534
Scratch resistance	3	EN EN 9428 : 1989
Resistance to cigarette	4	ENEN 9241 : 1978 UNI FA 275 : 1989
Resistance to temperature	5 no defect	EN 9429 : 1989
Surface resistance to dry heat	A (Class UNI 10944 / 00)	EN 12722 : 2009
Surface resistance to wet heat	A (Class UNI 10944 / 00)	EN 12722 : 2009
Surface resistance to cold liquids	E (Class UNI 10944 / 00)	EN 12720 : 2009
Index Flammability	Class A rating (20)	ASTM E84
Development Index smoke	Class A rating (110)	ASTM 84
Coefficient of Linear Thermal Expansion	- 10° ÷ 70° = 77,7µm / (m °C)	TMA ASTM E 831 : 2006
CONTACT WITH FOOD - TOTAL MIGRATION		
Distilled water	0,8 mg / dm^2	UNI EN 1186 : 2003
Ethanol	1,3 mg / dm^2	UNI EN 1186 : 2003
Acetic acid	2,1 mg / dm^2	UNI EN 1186 : 2003
ACTION OF MICROORGANISMS		
Bacteria	1	EN ISO 846 : 1997
Mushrooms	2	EN ISO 846 : 1997

Testing performed by the Laboratory CATAS SpA

TESTING THE STRENGTH CHEMICAL (24 HOURS)

CHEMICAL AGENTS	*NO EFFECT*	*EXCELLENT*	*GOOD*	*FAIR*	*FAILURE*
ACID					
Hydrochloric acid 10%		●			
Hydrochloric acid 37 %		●			
Sulfuric acid 98%		●			
Sulfuric acid 33%		●			
Nitric acid 65%		●			
Nitric acid 30% x		●			
Phosphoric acid 85% x	●				
Acetic acid 99% x	●				
Hydrofluoric acid 48% x		●			
Chromic acid 60% x	●				
BASES					
Ammonium hydroxide 28 %	●				
Sodium Hydroxide 46%		●			
SALT					
Silver nitrate 1 %		●			
Potassium permanganate 10%			●		
Ferric chloride (III) 10%	●				
Copper Sulphate 10%	●				
Sodium Hypochlorite 13%		●			
Sodium chloride 10%	●				
ORGANIC CHEMICALS					
Formaldehyde (need cap F) 37% - to remain consistent	●				
Furfural	●				
Formic Acid 90 %	●				
Acetic Acid 99 %	●				
Phenol 88%	●				
SOLVENTS					
Acetone	●				
Ethyl Alcohol	●				
Ethylene Glycol	●				
Mono Ethylene Glycol Butyl Ether	●				
Methyl ethyl ketone	●				
Dichloromethane	●				
Ethyl acetate	●				
Acetic Anhydride	●				
n- Butyl Acetate		●			
n- Hexane	●				
methanol	●				
Methyl isobutyl ketone	●				
tetrahydrofuran	●				
Toluene		●			
Trichloroethylene		●			
Xylene	●				
BIOLOGICAL STAINS					
Acridine Orange 1 %	●				
Basic Fuchsin 1 %			●		
Carbol 1%			●		
Green Oxalate Malicite 1 %	●				
Methylene Blue 1 %		●			
Methylene violet 2B 1 %			●		
Wright's stain 1 %	●				
Gentian violet (dye) 1 %	●				

10 YEAR GUARANTEE

All PaperStone® panels are covered by the manufacturer's warranty to ensure that it is total free from manufacturing defects.
However, a higher level of guarantee can be provided if the manufacture of the final product was carried out by a fabricator which is part of the:
PaperStone® National Certified Network.
In this case, each piece will be accompanied by a full 10 year warranty that not only guarantees the quality of the raw material but also the workmanship carried out by highly qualified and professional personnel. This Limited Guarantee on manufacture is in addition to the guarantee on raw materials and is valid throughout the national and European regions.

OTHER APPLICATIONS FOR HOME

Kitchen

Bathroom

Furnishing

Items

OTHER APPLICATIONS FOR COMMERCIAL

Chemical

Food

Retail

PaperStone® FEATURES BROCHURE

What is PaperStone®

PaperStone® because it is so green

PaperStone®

The Earth's Surface™

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info@paperstone.eu

PaperStone® is a Paneltech registered trademark