



PaperStone Features and Benefits

What is PaperStone?

PaperStone is the 'greenest' architectural surface on the market today. Common applications include; interior and exterior countertops, interior and exterior wall cladding (Rain Screen), conference tables, plaques or signs, cutting boards, window sills, toilet partitions, and much more. PaperStone-certified is certified by the Forest Stewardship Council or FSC, Smartwood and the Rainforest Alliance. It is the only architectural surface presently certified by these demanding third parties.

How is PaperStone made?

Most PaperStone products are made from post-consumer waste, recycled paper and proprietary, petroleum-free phenolic resins made from raw materials like cashew nut shell liquid. Organic pigments assure superior UV resistance, color stability and even color distribution throughout the entire panel.

There are two series of recycled paper-based PaperStone products:

- 1) 'Original', which is made from 50% recycled paper and
- 2) 'Certified', the FSC, Smartwood and Rainforest Alliance-certified product which is made from 100% post-consumer office paper.

What sizes are available and how is it fabricated?

Standard panel sizes are 60" x 144" in standard thicknesses of 3/4", 1" and 1-1/4". Other panel thicknesses and sizes can be special ordered. Contact your distributor for details.

PaperStone can easily be worked with CNC-routers and lasers to produce signs intricately detailed architectural components. Layering different colored resin saturated sheets in the panel production process further expands the range of design options possible.

Phenolic resin and paper composites have long been known to have superior tensile, compression, impact and flexural strengths. They are very abrasion resistant. They absorb very little water. They are the products of choice in applications requiring high fire resistance (PaperStone has a Class A fire rating).

- Mechanical attachments stay secure in tapped screw holes
- Router and laser detail limited only by workman's imagination
- Structurally rigid and sound in vertical and horizontal applications
- Millwork and cabinetmaker craftsmen can fabricate using traditional woodworking tools (e.g. triple-chip carbide blades).
- Unlimited edge detail with traditional tooling
- Seams carefully made with CA5 or two-part epoxy are tight and difficult to see.
- We recommend PaperStone finish. It is made from all natural raw materials.
- Sanding using a Scotch-Brite maroon or green pad will provide a smooth finish that will also help preserve the surface integrity.

Cost considerations

PaperStone panel prices are competitive with quality granite and brand name solid surface or quartz material products. As a result of the ease of workmanship and finish of PaperStone, the installed prices are often lower.

PaperStone™
The Earth's Surface™



www.usgbc.org



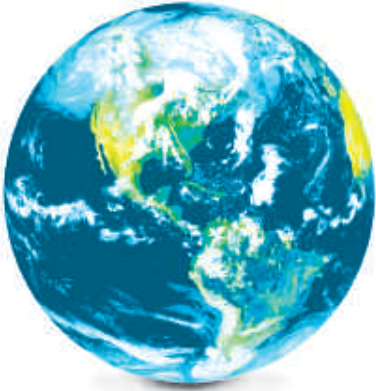
www.fscus.org



www.rainforest-alliance.org



www.rainforest-alliance.org/programs/forestry/smartwood/



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Environmental Impact Statistics

Depending upon the project, the use of PaperStone may contribute up to five LEED points in the categories of Materials and Resources, Indoor Environmental Quality and Innovation and Design Processes.

PaperStone has been thoroughly tested and certified as non-detectable for formaldehyde by the most demanding test available, the so-called desiccant method test. A 1" by 60" by 144" slab of PaperStone Certified (versus a regular phenolic composite manufactured from virgin fiber and a regular, commercially available, solvent-based resin) saves:

- 1233 gallons of water
- 2.03 million BTU's of energy
- 131 pounds of solid waste
- 254 pounds of greenhouse gases
- 55 pounds of petroleum-based phenol
- 22 pounds of natural gas-based methanol

Original PaperStone, with a 50% post-consumer recycled content product (versus 100% for PaperStone Certified), saves a similar amount of phenol, methanol and 50% of the water, energy, solid waste and greenhouse gases listed above.

PaperStone Specifications

Water absorption (by weight) 0.82%

Density (g/cm³) 1.4-1.45%

Internal bond (psi) 1,225 lbs.

Modulus of rupture (flexibility)

Face 24,320 psi

Edge 21,834 psi

Modulus of Elasticity 1,723.25 ksi

Compressive strength 45,324 psi

Coefficient of Thermal Expansion 3.64

Izod impact strength

Face 3.29

Edge 0.73

Hardness test Barcole meter (Barber Coleman) 47 avg.

UV exposure Slight darkening for light colors, dark colors are stable

ASTM E84 Fire Test Results

Flamespread Index: (20) Class A Rating

Smoke Developed Index: (110) Class A Rating

