



RICHLITE[®]
SPECIFIER MANUAL

BENEFITS

Heat Resistant

Richlite® is heat resistant up to 350° F. Due to its high heat resistance, the material does not need additional protection near stove areas. A trivet or hot pad is recommended to ensure no damage will be caused by exceedingly hot pots and pans pulled directly out of the oven.

Scratch Resistant

Richlite is denser and more durable than wood. The material is resistant to scratches but, like most surfaces, will scratch. Cut marks will appear if it is used as a direct cutting surface. If the counter has aged, the scratch or gouge may appear lighter than the surface until it naturally patinas over time. Richlite recommends the use of cutting boards to protect the surface from potential damage.

Stain Resistant

Generally speaking, Richlite surfaces resist stains quite well. As with all countertop material, there is potential for some staining. Most spills and light stains may be cleaned with a damp sponge. With stubborn stains, try a non-abrasive household cleaner—Richlite highly recommends SimpleGreen® All-Purpose Cleaner* and Murphy's Oil Soap because of their effectiveness and earth friendly ingredients. Richlite recommends fabricators finish the surface with Richlite Sealer to provide a rich, polished finish that requires minimum care.

Environmentally Sustainable

Countertop surface materials come in all makes, colors and qualities but only Richlite stands out for its unique paper content, natural look and warm appeal. It's produced out of environmentally sustainable materials unlike stone countertops quarried out of permanent holes in the ground. We're committed to building products that not only look good and last for years in the home or office, but also can be manufactured with as little impact on the environment as possible.

Durable

Richlite is extremely durable. It is stronger than stone and solid surfaces and can endure long spans and cantilevers without additional support. The same material has been used in the aerospace industry as tooling and prototyping material for over 40 years, as well as for commercial kitchen prep surfaces for over 30 years, and more recently as the leading worldwide skate ramp surface material. The kitchen is Richlite's least challenging environment.

Sanitary

Richlite does not support the colonization of bacteria and is food safe. Richlite cutting boards are certified by the National Sanitation Foundation (NSF Standard 51) for use with direct food contact in restaurants. The NSF sets standards and certifies food service related products for the industry. The same material is used in all colors of Richlite countertops.

Other Architectural Applications

Because of the machinability and durability of the material, Richlite is frequently used in numerous applications in addition to countertops. In both residential and commercial settings, Richlite can be found as wainscoting, window sills, stair treads and risers, cabinet toe kicks, millwork, as well as numerous other applications. Refer to the properties sheet and website for technical specifications.

Contributes to LEED points

Richlite provides a great product to incorporate into LEED building projects because of its environmental attributes. Please refer to the LEED section on page 15 for more detailed information on how Richlite supports LEED certification.

*Simple Green is a registered trademark of Sunshine Makers, Inc.

COLORS

Richlite sheets come in a variety of colors to suit any design style in the kitchen, bath or office. The original Natural Collection includes: Slate Black, Nutmeg, and Baguette; the recent Color Collection includes: Indigo, Merlot, Sage. Hemp is similar to Baguette in color but is manufactured with rapidly renewable hemp fibers.

Solid Color

Richlite's color comes from the color of the paper used in the manufacturing process, not from a surface treatment. As a result the color is solid all the way through the material. Since paper is a natural product derived from trees there are natural variations in the color of the finished product. Richlite does not add chemicals to make colors 100% stable. Adding chemicals, such as dyes, would change the makeup of the material during the manufacturing process and affect Richlite's environmental qualities.

Patina and Aging

Over time and with use Richlite will develop a seasoned appearance that is characteristic of the material. There will be more luster in areas of heavier use. Overall, it will appear softer and deeper in tone. To further understand the patina and aging process there are four important points to remember.

1. Aging is a process that begins immediately and may take a number of years to complete. It is similar to the manner in which natural wood products deepen in tone over time.
2. The effect of aging in Richlite material is primarily a result of the resin component, which begins as pale amber and deepens to a rich shade of sienna.
3. The aging and patina process cannot be controlled, and is most noticeable on the lighter colors. For this reason, there is no cause for concern should there be a tonal difference between sheets at the time of installation; once the aging process takes effect, both tones will begin to blend.
4. The color of Richlite is the result of the combination of the paper color used and the natural color of the resin. Richlite colors darken with age taking on a richer, warm tone appearance.

Tonal Variations

The tone of the color varies from sheet to sheet and even within a sheet. The tone has "depth" and can be described as comparing a stained finish to a painted finish. One would expect to see more variation in the stained finish.*

Baguette

Since the paper color is neutral, the color you see is purely that of the resin. It first appears as a pale, amber tone and over many years darkens toward sienna, very similar to an old fir floor.

Hemp

Very similar to the tone of Baguette, as the hemp fibers are also neutral.

Nutmeg

First appears as a medium brown tone, and ages into a warmer, honey-toned brown.

Sage

First appears cool-toned and develops into a warm, olive tone.

Indigo

First appears as a dark cobalt blue and darkens more toward Navy.

Merlot

First appears as a deep wine red, then darkens slightly and becomes warmer in tone.

Slate Black

Appears as an "off-black" and slightly deepens.

*Richlite samples obtained through dealers or the manufacturer may appear different than the installed product due to the age and patina of the samples.

Striations

Richlite has a "Mottled" appearance, which patterns in a striated effect lengthwise. This is less apparent on dark colors, however, the mottled appearance is still present. These qualities are due to the natural variation in the paper used to make the material. Hemp shows minimal striations, due to the nature (specifically the length) of the fibers used in the raw material.

Surface Texture

The surface texture and level varies. There will be more texture when it is first installed and will become smoother and develop more luster over time and with use. It may also have a slight unevenness here and there on the surface level; this is because it is pressed, not molded, into the sheets.



NUTMEG



SLATE BLACK



INDIGO



MERLOT



BAGUETTE



SAGE



HEMP

COMPARING RICHLITE

Richlite is in the same price range as stone and solid surface. Richlite surface is completely different from all other counter materials. The solid surface industry has educated consumers to expect a seamless installation, built-up edge, and connected back splash (among other details), which are natural properties/attributes of that material. Richlite does not fit into such a concept. Richlite dealers and specifiers are encouraged to focus on educating clients and consumers on the unique attributes of Richlite surface. Please feel free to contact your local rep for any assistance you may want in the way of promoting Richlite sales.

1. Good potential candidates for Richlite include people seeking environmentally friendly products, or considering alternatives such as concrete, soapstone, limestone, labtop products (fireslate), butcher block, wood, as well as granite; those who want a natural look; those who appreciate the beauty of something that shows the worn patina of use.
2. Consider recommending a different product for those who: want an even solid color, seamless installation, or polished finish (like a laminate or solid surface); expect their counter to stay in perfect new condition regardless of how they treat it.

Comparing to Stone

Richlite will stand up to heat (350°) without danger of cracking.

Richlite is stronger than stone; it requires no underlayment for support.

Richlite is warmer to the touch.

Richlite has a softer appearance.

Richlite has a slight "yield" so that crystal will not break when a glass is set down with authority, as would happen with a stone counter.

Richlite will not damage knives.

Routed drain boards can be easily cut into Richlite surface.

Comparing to Solid Surface

Richlite will not melt with heat exposure; requires no special care for areas adjacent to heat elements such as dishwashers and ranges.

Richlite is strong enough that seams can be placed exactly in the corners, and corners can be 90 degrees.

Richlite can span and cantilever to a much greater distance with minimum deflection.

Richlite has a natural honed look, not the plastic appearance common to solid surfaces.

Richlite has an appealing natural variation and tone.

The thickness is consistent through the entire Richlite slab, not just at the edge. This distinction is very apparent when using an under mounted sink, as the edge thickness shows at the sink cut out.

RICHLITE PLANNING–DESIGN AND LAYOUT

Edges

Built-up edges are not an appropriate application for this material for two main reasons. First, because of certain product characteristics, there may be additional stress on the thin “built up” section. When glued to the top, the two pieces may work against each other. Secondly, the seams will show, so to attempt to fabricate it in this manner is to work against the properties of the material. Because of the material characteristics, edge profiles can go from simple to extreme. Please check out the edge profiles on page 5.

Richlite fabricators generally will not fabricate a built-up edge. Many customers may assume building up the edges saves money in material costs. In practice, the cost is simply re-allocated into additional labor and materials needed to glue the edges. Additionally, built up edges are not covered by the Richlite warranty. Richlite recommends using a thicker surface material rather than building up an edge. The end result will look better and the costs will be similar to the extra labor involved in creating an inferior built up edge.

Thickness

The minimum thickness for horizontal use is 3/4". Half-inch is not stable enough, particularly once cut to install biscuits or spline joints, and is not recommended nor covered by warranty. Material thickness less than 3/4" is suitable for vertical use only, such as in back splashes or wainscoting. Richlite readily manufacturer’s 3/4", 1", 1 1/4", 1 1/2" and can produce custom product up to 3" thick. Please see the sizing chart on page 17 for a complete list of dimensions and weights. The thickness tolerance of Richlite slabs are +/- 4%.

Backsplash

Backsplash material is available in 1/2" thickness at 4", 5", and 6" heights. Half inch sheet material may also be used to create a custom backsplash or to cover an entire wall with Richlite.

Cabinets

Richlite is a heavy material. Designers who incorporate Richlite into their designs need to keep the weight in mind. Cabinets and hardware fittings must be designed to safely hold the weight.

Under Mount and Top Mount Sinks

Richlite can easily handle both under mount and top mount sinks. The advantage of Richlite is the sink cut out edge will be the same thickness as the front edge of the countertop, unlike many stone and solid surface materials where the sink edge is thinner than the face edge due to the stone and solid surface faux front edge. The minimum thickness for an under mount sink is 3/4".

Extended Cantilevers and Long Spans

Due to the extraordinary strength of the fibers inside Richlite, the material will not bend or break under normal circumstances. As a result, Richlite surfaces allow for greater design possibilities because it can accommodate long spans and extended cantilevers without adding extra support. The maximum length of spans and cantilevers is dependent on a variety of issues. A conservative rule of thumb is; 3/4" will remain stable with a 12" overhang, 1" with an 18" overhang, 1-1/2" up to 24". See General Guidelines for Cantilevers and Spans on page 18 for more specific information on Richlite cantilever and span capabilities.

Finish

Richlite is designed to hold a matte finish. A semi-gloss finish can be temporarily achieved by the fabricator using a finer sanding process. A higher gloss finish, however, may make scratches more apparent. Richlite recommends finishing the countertop with Richlite sealer.

RICHLITE PLANNING–DESIGN AND LAYOUT

Seam Placement

Seams will show slightly and should be incorporated into the design layout. For both structural and aesthetic reasons, seams should be placed at natural positions such as corners or midpoints. Additionally, in some cases it may not be appropriate to place seams at other cutouts or areas where they do not run the full depth of the counter. Seams may look awkward at such positions, including placing seams a few inches from a corner – where solid surface seams are placed to avoid breaking at corners. Structurally, Richlite seams may be placed exactly at a 90 degree (perpendicular) corner. Seams may also be placed over a dishwasher if necessary. Make sure your client understands where the seams will be placed and how the grain direction will run. The grain direction can tremendously affect the visibility of the seams; where grain directions meet in a perpendicular layout, the seam will be more noticeable.

Seamless Construction

Richlite manufactures sheets up to 60" x 144". In many instances this will be enough material for a seamless surface in an L-shaped countertop. Seamless L-shapes are advisable in Slate Black or Hemp, as these two colors tend toward displaying less pronounced striations. Due to the potentially more pronounced grain striations in other colors, seamless L-shapes are not advisable in all colors.

Grain Direction

Richlite has a "mottled" appearance, which patterns in a striated effect along the lengthwise dimension. This feature is most apparent in the lighter tones, but can be seen even in the black. Hemp has much finer and even striations, due to the composition of the fibers used to make the hemp paper. Consider the effect of grain direction when planning cuts; a grain direction running crosswise to the length of the counter may seem mismatched.

CARE & MAINTENANCE

Routine Cleaning and Upkeep

Richlite surface is a durable, attractive material designed to stay beautiful for the lifetime of your kitchen, bath or office space. A simple wipe up with a damp sponge on a regular basis will maintain its beauty. Alkaline soap such as regular dish soap will gradually dull the surface, this usually occurs around the sink area. The luster can be renewed with a light application of Richlite® Sealer if desired. Murphy's Oil Soap and other countertop cleaners such as a stone cleaner will lightly renew the luster if used on a regular basis. Richlite recommends that fabricators finish the surface with Richlite Sealer to provide a rich, polished finish that requires minimum care.

Removing Stains

Generally speaking, Richlite resists stains quite well. As with most any material, there is a potential for some staining. With stubborn stains, try a non-abrasive household cleaner—Richlite highly recommends Simple Green® All-Purpose Cleaner* because of its effectiveness and earth friendly ingredients.

Repairing Scratches and Burn Marks

Richlite is extremely dense and durable. The material resists scratches and burns but, like most surfaces, can potentially be damaged by cutting directly on the surface or setting a hot frying pan on the surface. Richlite recommends the use of cutting boards, hot pads and trivets to protect the surface from potential damage.

Before clients decide to refinish their countertop, please have them seek the advice of the dealer or fabricator who installed the counter. In most cases, it is preferable if the installer refinishes the surface for your client. Light scratch marks and burn marks can be refinished using a Scotch-Brite® pad (#7447/Red Color). It is important to note, the refinished area will noticeably lighten compared to the surrounding surface area. Richlite surfaces are made of paper which, like wood, patinas – or darkens – over time, especially in the lighter colors such as Baguette. The area will eventually patina and match the remainder of the counter surrounding it. In order to avoid affecting one spot, lightly refinish the entire section of the counter.

General Precautions

Richlite countertops are stain resistant to nearly all kitchen related substances with the exception of some raw meat juice (such as liver), high-alkaline fruit or vegetables (such as papaya and red beet), and high-alkaline soaps (such as automatic dishwasher powder and oven cleaners) when left in contact for a prolonged time. Additionally, grout (which is a high alkaline product) will lighten darker-colored Richlite counters and darken the lighter tones. Cover the surface with a protective sheet when installing tile around countertop areas.

* SimpleGreen is a registered trademark of Sunshine Makers, Inc.; and Scotch-Brite is a registered trademark of 3M Company.

ENVIRONMENT

Environmental & Social Commitment

Richlite is beautiful and sustainable. Our paper is made from pulp harvested from Certified Managed Forests in North America. The company is committed to reducing its impact on the environment by practicing sound manufacturing processes and producing products with sustainable materials.

Richlite is the first company to offer hemp-based countertops, a visually unique surface alternative that's produced from an exceptionally sustainable resource. Richlite's hemp counters are made with fast-growing abaca fibers purchased from the Philippines and Ecuador. Abaca is a type of plant noted for its fibers used in weaving. The fibers, commonly referred to as hemp, have been used in textiles for more than 6,000 years. Few textiles are as strong or as long lasting as hemp. Today more than 25,000 products, including monetary currency and now countertops are made with the rapidly renewable fibers.

Green Product

Richlite is classified green in large part because the predominate raw material is derived from renewable resources. Managed and sustainable forests, habitat conservation efforts, along with prudent manufacturing practices are just some of the environmental mandates that go into our product. We use the most environmentally benign production methods and materials available. During the saturation and drying process, over 99% of the volatile organic compounds are incinerated. The heat from that incineration is used for the drying process to minimize thermal pollution. There is virtually no hazardous waste generated in our process.

Recycled Content

Richlite uses a custom paper with specific composition attributes that directly affect the manufacturing process and the percentage of recycled content. Quality control and product performance are challenged when the paper formula is excessively altered due to an increase in recycled paper content. Richlite examines and implements environmentally sound resources and manufacturing processes throughout its operations. The paper used in Richlite's surface materials have minimal impact on the environment in comparison to the chemically-driven process used to manufacture most recycled papers. Richlite will continue to evolve with the environmental products industry as new, cleaner alternatives are discovered over the coming years.

LEED

Gain LEED points in your structure by using Richlite material. Below, please find a list of LEED credits under which Richlite surface may qualify.

MATERIALS & RESOURCES

Credit 5.1 (points = 1)

Regional Materials: 20% manufactured regionally
Use a minimum of 20% of building materials and products that are manufactured regionally within a radius of 500 miles.

Richlite is manufactured in Tacoma, Washington.

Credit 5.2 (points = 1)

Regional Materials: 50% manufactured regionally
Use a minimum of 50% of building materials and products that are manufactured regionally within a radius of 500 miles.

Richlite is manufactured in Tacoma, Washington.

Credit 6 (points = 1)

Rapidly Renewable Materials

Use rapidly renewable building materials and products (made from plants that are typically harvested within a ten-year cycle or shorter) for 5% of the total value of all building materials and products used in the project.

Richlite Hemp material is a perfect representation of a rapidly renewable material. Although our other Richlite products are derived from certified managed forests they do not fall under the ten-year cycle.

INDOOR ENVIRONMENTAL QUALITY

Credit 4.4 (points = 1)

Low-Emitting Materials: Composite Wood

Composite wood and agrifiber products must contain no added urea-formaldehyde resins. Richlite uses a phenolic resin and the finished product is formaldehyde-free.

INNOVATION & DESIGN PROCESS

Credit 1 (points = 1-4)

Innovation in Design

In writing, identify the intent of the proposed innovation credit, the proposed requirement for compliance, the proposed submittals to demonstrate compliance, and the design approach (strategies) that might be used to meet the requirements.

Considering over 60% of the raw material used to manufacture Richlite is derived from certified managed forests, Richlite could be submitted as part of an innovation proposal.

PRICING, POLICY AND DISTRIBUTION

Price

Richlite is in the same price range as stone and solid surface. Please contact your rep for a list of local fabricators who will then be able to quote prices, availability, lead times, order status, and delivery details.

Samples

Product samples may be obtained through your local representative. There is up to date contact information on the Richlite website:
www.richlite.com.

Policy

Fabricators are under obligation to sell Richlite in a fabricated and installed condition. Richlite surfaces 3/4" and thicker are available in sheet form only within the network of authorized fabricators. This ensures the quality and consistency of fabrication standards.

Distribution

Richlite distributes directly to certified fabricators throughout the United States.

LeadTime

(General lead time from Richlite factory)
Lead time from the manufacturer is a maximum of three weeks. If the fabricator does not have sufficient Richlite material in stock, their lead time for a job may be increased due to the manufacturer's lead time and shipping.

WARRANTY

Richlite Surface Countertops Lifetime Limited Warranty

(only applies to three quarter inch and thicker sheets)

Richlite Company warrants that its Richlite surface countertop material will be free from material defects for as long as the original retail purchaser owns the product, PROVIDED THAT such products were properly fabricated and installed by a certified fabricator.

The obligation of Richlite Company and its certified fabricators is limited to repair or replacement of the countertop found to be defective and excludes shipping charges and costs of removal and reinstallation. Repairs will be made with like or similar material.

To obtain warranty service, contact the authorized dealer from whom you purchased the product. Your dealer will work with its certified Richlite surface fabricator to promptly repair or replace any defective pieces. If you require further assistance, contact Richlite Company at the address or telephone number listed below. Warranty claims must be accompanied by proof of purchase, as well as details regarding the nature of the problem, location of the product, etc.

This warranty does not cover any conditions or damages resulting from accidents, alterations, misuse, abuse, exposure to the elements, excessive humidity, fading or discoloration over time, or failure to follow our instructions with respect to measurement, installation, cleaning or maintenance. This warranty also does not cover any condition or damage resulting from removal of the product or

reinstallation in the same or different application. For a list of Richlite authorized dealers, please visit www.richlite.com. The warranty will become invalid if Richlite surface material is purchased outside of the authorized dealer network and is not fabricated by a Richlite certified fabricator. This warranty does not apply to conditions caused by normal wear and tear upon the product.

THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER OBLIGATIONS, LIABILITIES OR WARRANTIES. In no event shall Richlite Company or its certified fabricators be liable or responsible for INCIDENTAL OR CONSEQUENTIAL DAMAGES or for any other direct or indirect damage, loss, cost, expense or fee. Some states do not allow the exclusion or limitation of incidental or consequential damages, so this exclusion or limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

Richlite Company
624 East 15th Street
Tacoma, Washington 98421
888 383 5533 phone
253 383 5536 facsimile
info@richlite.com email
www.richlite.com web

GENERAL GUIDELINES FOR RICHLITE CANTILEVER AND SPANS

Cantilever Span

length	thickness	force	breadth of countertop							
			12"	18"	25"	30"	36"	42"	48"	60"
			max deflection							
12"	.75"	100 lbs	.070"	.047"	.033"	.028"	.023"	.020"	.017"	.014"
18"	.75"	150 lbs	.356"	.244"	.171"	.142"	.118"	.101"	.089"	.071"
18"	1.0"	150 lbs	.150"	.100"	.072"	.060"	.050"	.043"	.037"	.030"
18"	1.25"	150 lbs	.076"	.050"	.037"	.030"	.025"	.022"	.019"	.015"
18"	1.5"	150 lbs	.044"	.029"	.021"	.018"	.015"	.013"	.011"	.009"
24"	1.0"	150 lbs	.356"	.244"	.171"	.142"	.118"	.101"	.089"	.071"
24"	1.25"	150 lbs	.181"	.120"	.087"	.072"	.060"	.051"	.045"	.036"
24"	1.5"	150 lbs	.105"	.070"	.050"	.042"	.035"	.030"	.026"	.021"

Simple Span

length	thickness	force	breadth of countertop							
			12"	18"	25"	30"	36"	42"	48"	60"
			max deflection							
24"	.75"	100 lbs	.035"	.023"	.017"	.014"	.012"	.010"	.008"	.007"
36"	1.0"	150 lbs	.075"	.050"	.036"	.030"	.025"	.021"	.018"	.015"
36"	1.25"	150 lbs	.038"	.025"	.018"	.015"	.012"	.010"	.009"	.007"
48"	1.5"	200 lbs	.070"	.046"	.033"	.028"	.023"	.020"	.017"	.014"
48"	1.75"	200 lbs	.044"	.029"	.021"	.017"	.014"	.012"	.011"	.008"

Maximum Deflection Ratings

Most Acceptable
Acceptable
Unacceptable
Most Unacceptable

IMPORTANT NOTE: Calculating spans and cantilevers incorporates numerous variables, including thickness of material, the length of the overhang, the breadth (or width of the countertop), and the amount of weight it needs to support. It is important that the specifier appropriately calculate the specifications based off Richlite properties defined in the properties section due to these variables and to abide by the varying code regulations enforced in different areas of the country.

FREQUENTLY ASKED QUESTIONS

Is Richlite a solid surface?

By the technical definition of solid surface, no. Most solid surface materials combine two main ingredients: a natural mineral (the "filler") and a resin (the "binder"), along with various additives. These are combined and then formed in a curing process that results in a sheet or a shape. All that being said, Richlite may be assumed by many to fall within the solid surface category because of the solid color through the material. If you cut it in half you'd find the same surface on the inside as you started with on the outside. But it's not a poured plastic with fillers like most of the other products that call themselves solid surfaces. And it's not a kind of laminated sandwich where a nice topskin is glued to a cheaper substrate. Richlite truly is in a class of its own.

What materials are used to produce Richlite?

Richlite specializes in the manufacture of natural fiber composites. Richlite is primarily paper treated with phenolic resin and baked to create a solid sheet. During the production cycle the layers of paper are gradually cross-linked with each other to create solid, durable sheets. Once the curing process is complete, the structure of the product is permanent and cannot be altered. The final product is exceptionally strong and still maintains a warm and natural look.

Where does Richlite paper come from?

Richlite paper comes from pulp that is derived from trees. The trees are harvested from managed forests in North America that are certified by the Forest Stewardship Council. The FSC is the only organization offering a credible worldwide timber certification system for all forest types and plantations, and as such has already received endorsement and active commitment from a wide range of respected NGOs, including WWF, Friends of the Earth, and Greenpeace.

Richlite Hemp countertops are manufactured from paper derived from abaca fibers, commonly called hemp, from Ecuador and the Philippines. Hemp is an extremely sustainable crop that has been used in thousands of textiles for centuries. Richlite is the first company to produce surface materials out of the fibers.

What type of paper is used?

Richlite uses a specially-formulated custom paper specified for color and strength capabilities.

Does Richlite use recycled paper?

Although some recycled content is used in Richlite, the company does not have a set content percentage requirement established for its manufacturing process. Recycled paper isn't uniform so producers have to add fillers that don't meet the standards of Richlite's custom paper. In addition, recycled paper producers have to use large amounts of harmful chemicals to clean the paper which may not meet Richlite's environmental standards.

Is it considered a "green" product?

Yes. Richlite is classified green in large part because the predominate raw material is derived from renewable or recycled resources. Managed and sustainable forests, habitat conservation efforts along with prudent manufacturing practices are just some of the environmental mandates that go into our product.

We use the most environmentally benign production methods and materials available. During the saturation and drying process, over 99% of the volatile organic compounds are incinerated. The heat from that incineration is used for the drying process to minimize thermal pollution. There is no hazardous waste generated in our process.

Does Richlite off-gas?

No. Richlite does not off-gas because the compounds inside it chemically cross-link during the manufacturing process and are locked into the solid surface creating a homogenous material.

FREQUENTLY ASKED QUESTIONS

(continued)

What are the VOC emission levels?

Particulate emissions at our manufacturing facility are subject to control devices that operate at 99% efficiency. Volatile Organic Compound (VOC) emissions are virtually eliminated through state-of-the-art equipment that maintains a very high destruction of particulate matter. There is no hazardous waste generated in our process. Best Available Control Technology (BACT) is the standard to which Richlite manufactures all of its products. VOC concentration levels from our manufacturing process are held within acceptable limits set forth by Washington State regulated emission standards. In fact, BACT standards for VOC control have an established minimum destruction efficiency of 95%; while Richlite manufacturing emissions are controlled at a higher destruction efficiency of up to 99.3%.

Is Richlite inert?

Yes. It's completely safe. In tech-speak Richlite is inert due to the complete cross linking of reactants or free radicals. In fact, the most common use of Richlite product has been for National Sanitation Foundation-approved cutting boards in restaurants.

What is the technical composition of Richlite?

Richlite is comprised of cellulose fiber and phenolic resin. Cellulose, a polymer material fundamental to all plants found in nature, is derived through pulping which is the initial process in manufacturing paper products.

Primarily, Richlite incorporates wood-sourced cellulose fiber derived from renewable, managed forests combined with some recycled cellulose fiber to satisfy our fiber needs. Most fiber material that we receive has an unspecified recycle content due to fluctuations within the paper industry that make adherence to exact proportions difficult.

Is it possible for phenolic resin to be derived from recycled materials?

Recently conducted studies promise that phenolic resin will soon be derived from recovered liquid hydrocarbons through industrial recycling of carbon fiber composites. Due to very popular and widespread applications of carbon fiber composite, it is inevitable that high-volumes of its recycled material will soon be present in our marketplace. Completion of the carbon fiber recycle loop will be a significant and desirable step toward greater environmental awareness. And, as a direct result, phenolic resin will become a more proactive environmental material.