

KIREI BOARD

kirei
natural design innovation



Kirei Board Sushi Bar
Mr. Tiki Mai Tai Lounge
San Diego, CA



Kirei Board Specification Information

Kirei Board: A beautiful natural material made with renewable, non-toxic components.

Strong, lightweight and environmentally friendly, Kirei Board is an easily worked engineered panel product usable in nearly any architectural application:

- › Architectural millwork
- › Cabinetry
- › Furniture
- › Interior design
- › Retail displays
- › Hotel/Restaurant
- › Wall covering
- › Flooring
- › Finished products

The Tao of Kirei:

Pronounced "Ke'ray," Kirei is the Japanese character signifying "clean" or "beautiful."

We have chosen Kirei as the name for our company to reflect our dedication to the principles of elegant, sustainable design

Kirei Board Cocktail Table
by Organo



ENVIRONMENTAL BENEFITS

Kirei Board reduces forest clear-cutting, air pollution and landfill use. The sorghum stalks used in the manufacture of Kirei Board are a rapidly renewable resource left after the edible portion of the plant is harvested.

REDUCED WASTE

Until now, these stalks have been discarded or burned, adding to landfill waste and pollution. Kirei Board helps reduce this waste and ease deforestation by substituting for wood.

In addition, Kirei Board is made using a non-toxic adhesive that does not contain formalin, helping reduce toxic formaldehyde VOC's released into the ambient indoor air.

Kirei Board can be an excellent way to help your projects qualify for LEED credit for environmentally friendly construction.



Eco-\$mart, Inc.

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Material Specifications

Kirei Board is a composite panel board manufactured from reclaimed stalks of the sorghum plant, poplar wood bonding layers and KR Bond, an adhesive that emits no formaldehyde. Strong, lightweight and environmentally friendly, Kirei Board has been in use for wall covering, cabinetry, furniture, flooring and other decorative and finished products since 1995.

Dimensions:

Sheet Size	910mm x 1820mm (3 x 6)
Thickness	10mm (.39") 20mm (.79") 30mm (1.18")
Sheet Weight (3'x6' sheet)	10mm 19.4 lbs 20mm 35.1 lbs 30mm 43.2 lbs
Density	10mm 33.3 lbs/ft ³ 20mm 22.3 lbs/ft ³ 30mm 22.3 lbs/ft ³

Physical Properties:

Modulus of Rupture	1800mm 200kg ³ /cm ² 900mm 75 kg ³ /cm ²
Modulus of Elasticity	1800mm 2.80 x 10 kg ³ /cm ² 900mm 0.78 x 10 kg ³ /cm ²
Internal Bond	1.5 kg/cm ²
Screw Holding Power	Face 25 Kg Edge 10 Kg
Flame Spreading (UL-HBF)	3.025 inch/second



Kirei Board Adhesive

KIREI board is manufactured using KR Bond, a water-based polymer-isocyanate adhesive. Formaldehyde-free KR Bond does not contribute harmful Volatile Organic Compounds (VOCs) to the indoor atmosphere. Testing according to Japanese Government standard JIS A 6922-2003 resulted in 0.0 mg/L formaldehyde emission



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Kirei Board is machinable using standard fabricating techniques applicable for wood-based products.

Cutting:

For best results use a high-quality saw blade, feeding the material at a uniform speed through the saw. Solidly back panels to prevent chipping along kerf on the saw tooth exit side. Finishing material with a sealer coat can help avoid chipping along saw cuts.

Drilling:

A high-speed drill is recommended. To avoid chipout or breakage on the exit side, back the panel with scrap material.

Routing:

A speed of 20,000 RPM is recommended using double-fluted router bits.

Filling:

Standard wood putty can be used to fill any chips or holes caused by cutting and sanding. Select a color that best matches the color of Kirei Board or your finish color.

Fastening:

All fastening methods may be used, including nail, staples, rivets, screws, bolts, glue or combination. Type A or AB, sheet metal, twin fast types and fully threaded screws designed for use in particle board offer better withdrawal resistance than wood screws. Pre-drilled pilot holes are recommended for the size screw used. If nailing, use spiral or ring shank nails for extra holding power.
(Note: Nailing or screwing into edge grain may result in lower screw holding power due to fewer cross-layers being engaged.)

Finishing:

Kirei Board panels can be filled, sealed, painted, stained or varnished with most commercial finishing materials including short and medium oil length primers, fillers, lacquers, and synthetic base coats and topcoats and high temperature bake and acrylic and epoxy systems. The panels should be at stable room temperature (70 degrees F and higher) when coated. Kirei recommends Low-VOC emission finishes.

Edge Treatment:

The exposed edges of Kirei Board are intended to be finished, unless the type of application does not require a more finished appearance than sanding affords. If shaped exposed edges are required, filling, sanding and painting of the edge will provide a satisfactory finish. Kirei Board can be edge banded with most commercial edge treatments using standard adhesives.