Kirei Board

zen modern





Modular Console | Designer: Paul Basile

The Tao of Kirei:

Pronounced "Key'-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.

durable, environmentally friendly substitute for wood—usable in furniture, cabinetry, casework, and interior design elements. Manufactured from reclaimed sorghum straw and no-added-formaldehyde adhesive, Kirei board brings a beautiful new element to modern interior design.

Kirei Board is a strong, lightweight,

Use Kirei Board in architectural, millwork and finished product applications:

Architectural Millwork Interior Design Wall Covering Cabinetry Retail Displays Flooring **Furniture** Restaurant Finished Products Hotel

Kirei and LEED

Kirei design elements can help your projects gain LEED credit for environmentally friendly construction.





kirei

For purchasing information:

Kirei USA 1805 Newton Avenue San Diego, CA 92113 TEL 619-236-9924 FAX 240-220-5946 www.kireiusa.com info@kireiusa.com



Kirei Board 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'x6')
Thickness	6mm (.24")
	10mm (.39")
	20mm (.79")
	30mm (1.18")

Sheet Weight

(1'x6' sheet)	6mm	4.5 lbs
(3'x6' sheet)	10mm	19 lbs
(3'x6' sheet)	20mm	35 lbs
(3'x6' sheet)	30mm	45 lbs
Density	10mm	33.3 lbs/ft3
	20mm	22.3 lbs/ft3
	30mm	22.3 lbs/ft3

Physical Properties:

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Modulus of Rupture	1800mm	200kg3/cm2
	900mm	75 kg3/cm2
Modulus of Elasticity	1800mm	2.80 x 10 kg3/cm2
	900mm	0.78 x 10 kg3/cm2

Internal Bond	1.5 kg/cm2
Screw Holding Power	Face 25 Kg
	Edge 10 Kg

Flame Spreading 3.025 inch/second

(UL-HBF)



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.

Zero VOC

In addition, Kirei Board is made using a non-toxic adhesive that does not emit toxic formaldehyde.

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

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.



Fabrication Guidelines

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.

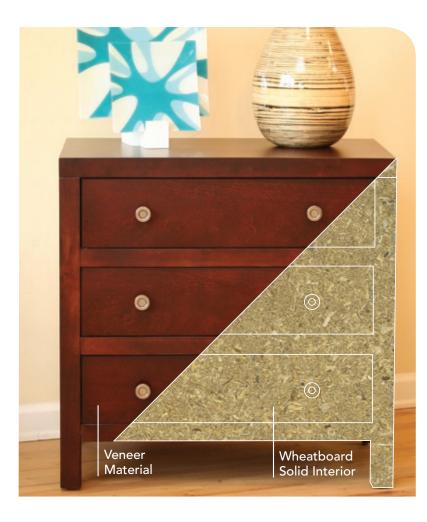
Edge Treatment:

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.

Kirei WheatBoard

clean, green MDF





IT'S WHAT'S INSIDE.

Kirei WheatBoard is the answer to formaldehyde-emitting wood MDF products. With working characteristics meeting and often surpassing those of commercially available MDF, plus renewable source materials and non-toxic adhesives, Kirei Wheatboard gives you a clean slate to build what your mind designs. Projects and products receive LEED™ credit for rapidly renewable material, recycled content, and indoor air quality.

Use **Kirei WheatBoard** in architectural, millwork and finished product applications:

Architectural Millwork Interior Design
Wall Covering Cabinetry
Retail Displays Flooring
Furniture Restaurant
Finished Products Hotel

Kirei and LEED

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Kirei WheatBoard Specifications:

Use Kirei WheatBoard in millwork, cabinetry and finished product applications for a renewable, non-toxic alternative to MDF. Kirei Wheatboard can be painted or laminated with a wide variety of surface treatments including our Kirei Bamboo Veneers.

Dimensions:

Sheet Size 1220mm x 2440mm (48"x96")

Wheatboard 12.7mm (1/2")
Thickness 15.8mm (5/8")
17.5mm (11/16")
19.1mm (.75")
Tolerance +/- 0.005"

Sheet Weights

 (1/2")
 54 lbs

 (5/8")
 62 lbs

 (11/16")
 71 lbs

 (3/4")
 81 lbs

Mean Density 40-41 lbs./f3

(Larger sizes available for laminating applications)

Custom thicknesses & sizes available

Environmental Benefits

Kirei WheatBoard reduces forest clear-cutting, air pollution and landfill use. The wheat stalks used in the manufacture of Kirei WheatBoard 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 WheatBoard helps reduce this waste and ease deforestation by substituting for wood.

Zero VOC

In addition, Kirei WheatBoard is made using a non-toxic adhesive that does not emit toxic formaldehyde.

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

Kirei WheatBoard Adhesive

KIREI Wheatboard is manufactured using a no-added-formaldehyde MDI adhesive which does not contribute harmful Volatile Organic Compounds (VOCs) to the indoor atmosphere.



Physical Properties:

Modulus of Rupture 2176 psi
Modulus of Elasticity 311,832 psi
Internal Bond 79.77 psi
Screw Holding Power

Perpendicular to Plane
Withdrawal from Edge
Internal Bond
247 lbf
157 lbf
79.77 psi

8%

Thickness Swell (24-hour immersion)

Water Absorbsion 20%

(24-hour immersion)

Moisture Content 8%





Fabrication Guidelines

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

Cuttina:

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 KireiWheat 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 WheatBoard 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 WheatBoard 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 WheatBoard can be edge banded with most commercial edge treatments using standard adhesives.

Kirei Bamboo

organic contemporary





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Kirei Bamboo is an eco-friendly panel material with a variety of surface and millwork looks usable in modern interior design and finished products. Bamboo is a rapidly renewable, sustainable resource, and we use no added formaldehyde for the production of our panels, so Kirei Bamboo can help your projects meet **LEED**TM specifications.

Use **Kirei Board** in architectural, millwork and finished product applications:

Architectural Millwork

Wall Covering

Retail Displays

Furniture

Finished Products

Interior Design

Cabinetry

Flooring

Restaurant

Hotel

Kirei and LEED

Kirei design elements can help your projects gain LEED credit for environmentally friendly construction.



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Kirei Board Specifications:

Kirei Bamboo is an eco-friendly modern millwork material manufactured from the fast-growing trunks of the Moso Bamboo plant and a no-added-formaldehyde adhesive. Bamboo Paneling is strong and dense, and can be used in a wide variety of millwork applications.



Specifications:

Sheet Sizes 4'x8' Sheets

Thickness

Veneer .6mm (.24")

10mm (.39") 19mm (.75")

Custom thicknesses available

Face Grain styles:Colorways:Lamination Styles:Horizontal GrainNaturalVeneerVertical GrainAmber/SolidZebraCarbonized3-Ply Horizontal Core

Zebra 3-Ply Vertical Core

Environmental Benefits

Rapidly Renewable

Kirei Bamboo reduces forest clear-cutting and indoor air pollution. Bamboo is a rapidly renewable resource with a fast growth cycle, resulting in higher material yield per acre than tree planting.

No Added Formaldehyde

In addition, Kirei Bamboo is made using a no-added-formaldehyde MDI adhesive.

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



Fabrication Guidelines

Kirei Bamboo 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 Bamboo 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 Bamboo 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 Bamboo 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 Bamboo can be edge banded with most commercial edge treatments using standard adhesives.