



2023
20th Anniversary

LIGHTWAVE
LASER

ELEGANCE AND EXPERTISE IN LASER CUTTING

20 YEARS!

We are proud to begin our 20th year of business! Looking back, I'd like to highlight a few things I'm thankful for. First, co-workers and customers who appreciate the beautiful products we make. The products are gratifying on their own, but how rewarding to share this creative experience with others.

Second, I'm thankful for the talented designers who include us on their projects. As you might imagine, we get asked to make all sorts of amazing, intimidating, and crazy things. We can't make everything, but we try to stay open to projects that are a step beyond what we have done in the past. Over time, this nudge from designers expanded our capabilities and informed us of new and innovative resources.

Finally, I'm thankful for a career that combines my lifetime love of design and technology. There's a never-ending stream of new trends, materials, and technologies. We are lucky to be on the front lines in our industry and we take advantage of these new opportunities to contribute to well-designed environments throughout the world.

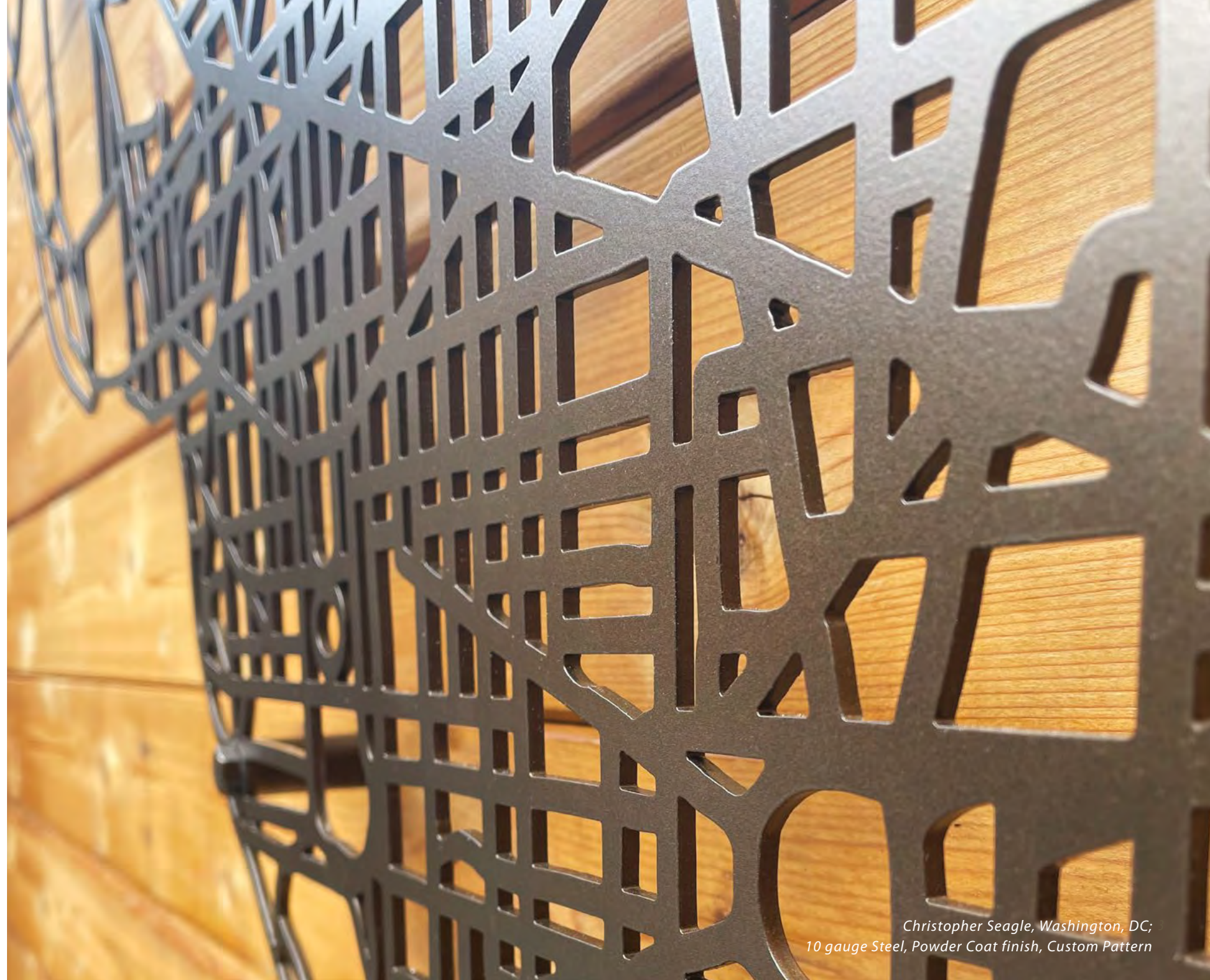
Thanks for your support during the last twenty years, and here's to continued mutual success!

NEW FOR 2023

- We are on the forefront of new developments in powder coating on MDF. We now provide better metallics and more color options. We currently provide finishing on most projects. As far as we know, we are the only company powder coating laser-cut MDF panels.
- Vertical integration and improved manufacturing efficiencies allow us to minimize price increases for our product compared to the higher prices of many other building materials. Lightwave Laser is now a more cost-competitive option.
- An increasing number of our jobs involve more panels, and cover larger areas. This is a result of the ability to fit into construction budgets, and the dynamic impact of our product on the finished space. We still pride ourselves on taking every size project, from a single panel to hundreds of panels.
- We have 22 new patterns, for a total of 208 standard patterns to choose from. We are known for our well-designed, on-trend patterns covering many styles and influences.

Thanks,
Ron Macken, President/Owner

Cover: Cordrey Collection, Los Angeles, CA; ¾" MDF, Customer-finished, Braids Pattern
2 Back Cover: Balian Springs, Alexandria, VA; ¾" Medex, Metallic Gold Powder Coat finish,
Wispy Palms Pattern



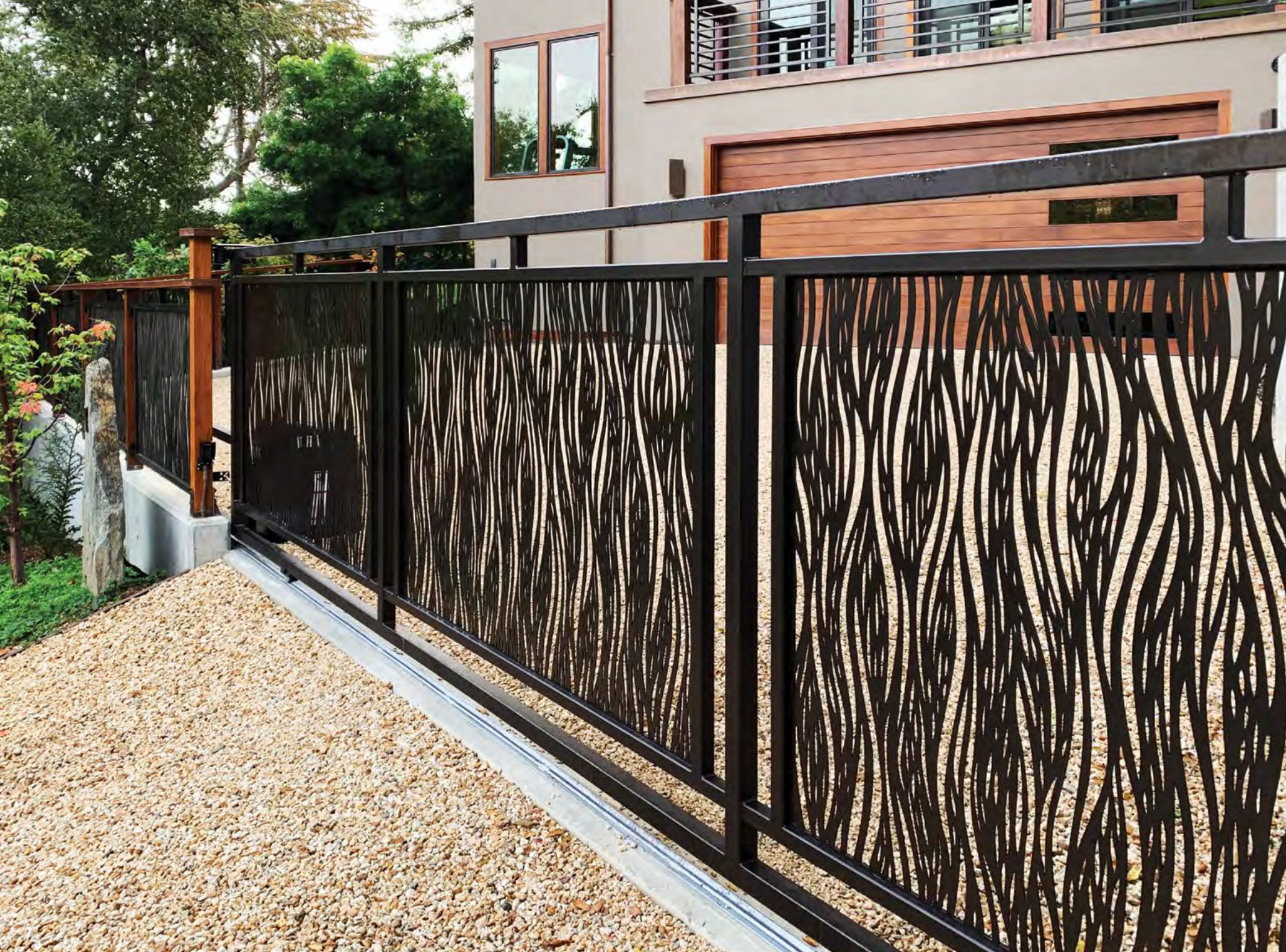
Christopher Seagle, Washington, DC;
10 gauge Steel, Powder Coat finish, Custom Pattern



Tenant Contractors, Center State Bank, Jacksonville FL
 Aluminum wrapped panels, unfinished, Woven Wire Pattern

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APPLICATIONS

“Oh, my goodness - basically from start to finish we could not be more satisfied! Had been looking for wall art for our new home’s dining room, and while in a Salt Lake City restaurant saw just what we wanted.

Searched the web and found Lightwave Laser - the exact company who had done the restaurant’s art. Worked through the website for just the right design and size/color details, and Ron helped us get exactly what we wanted. The wall art was finished in the time specified and then shipped, arriving in perfect condition.

With the instructions/guidance we’d been sent we were easily able to find a handyman to hang the triptych, and can’t wait to have a dinner party showcasing the art Lightwave Laser did for us.”

— MARTI S.

Anu Kulkarni Residence, San Jose, CA;
10 gauge Steel, Powder Coated, Waterfall Pattern

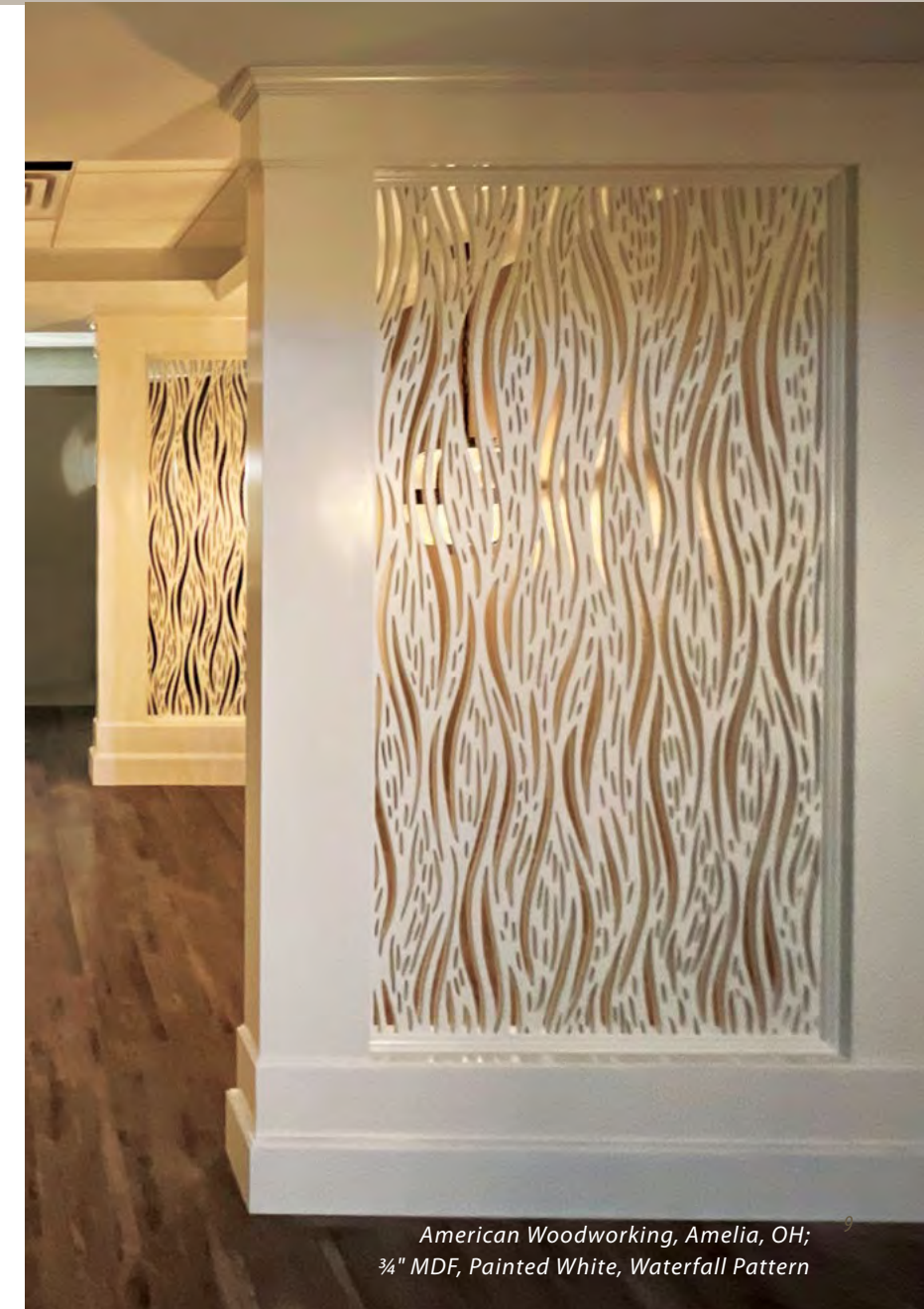


Edge Construction, The Ridge Pinehurst Senior Living, Lakewood, CO;
1/2" Walnut, Clear Powder Coat, Casablanca Pattern

WALL PARTITIONS

Wall partitions are our most popular application — they help define a space, while also allowing light and visibility from other areas. For residential and hotel projects, a wall partition can be used to divide an entry area from the rest of the room. This makes the entry area both separate and connected.

In a restaurant setting, wall partitions are commonly used to define the dining area from other areas, such as a hallway, bar or kitchen. Back-lit options are available for these panels which adds a stunning, decorative aesthetic.



American Woodworking, Amelia, OH;
3/4" MDF, Painted White, Waterfall Pattern



Triton Custom Woodworks, Myrtle Beach, SC; ¾" MDF, Painted, Custom Pattern

"Our restaurant turned out beautifully, and we are receiving rave reviews on the interior as well as the laser panels; they were the perfect complement to the decor."

— KRISTIN LYONS,
KDL INTERIOR DESIGN



ISEC Inc., Westminster, Boerne, TX; ½" MDF, Powder Coated, Circles 1 Thick Pattern



Watson & Comopany, Denver, CO; ½" Maple, Rota Star Pattern



Pridgen Woodwork, Whiteville, NC; ¾" Maple, Painted, Open Basketweave Pattern



Heavenly Bamboo Pattern

BACK-LIT AND LIGHT BOXES



DNP Interior, Northpark Apartments, Burlingame, CA; ¾" White Oak

Back-lit panels, also referred to as light boxes, can be used in a wide variety of applications and create a dramatic focal point for your space. We manufacture custom light boxes designed to your specifications, sized up to five feet by eight feet, and made of wood or metal. Each light box comes hardwired and ready for installation by your electrician. If you'd like, you can request a standard power cord.

Typical light boxes sit four inches deep from the wall. Giving off virtually no heat, they can be fully enclosed. They include white, low voltage LED lights, frosted light-diffusing acrylic panels, and a transformer with a dimmer. The LEDs come in a standard halogen white color. RGB colors and warm white are special order.

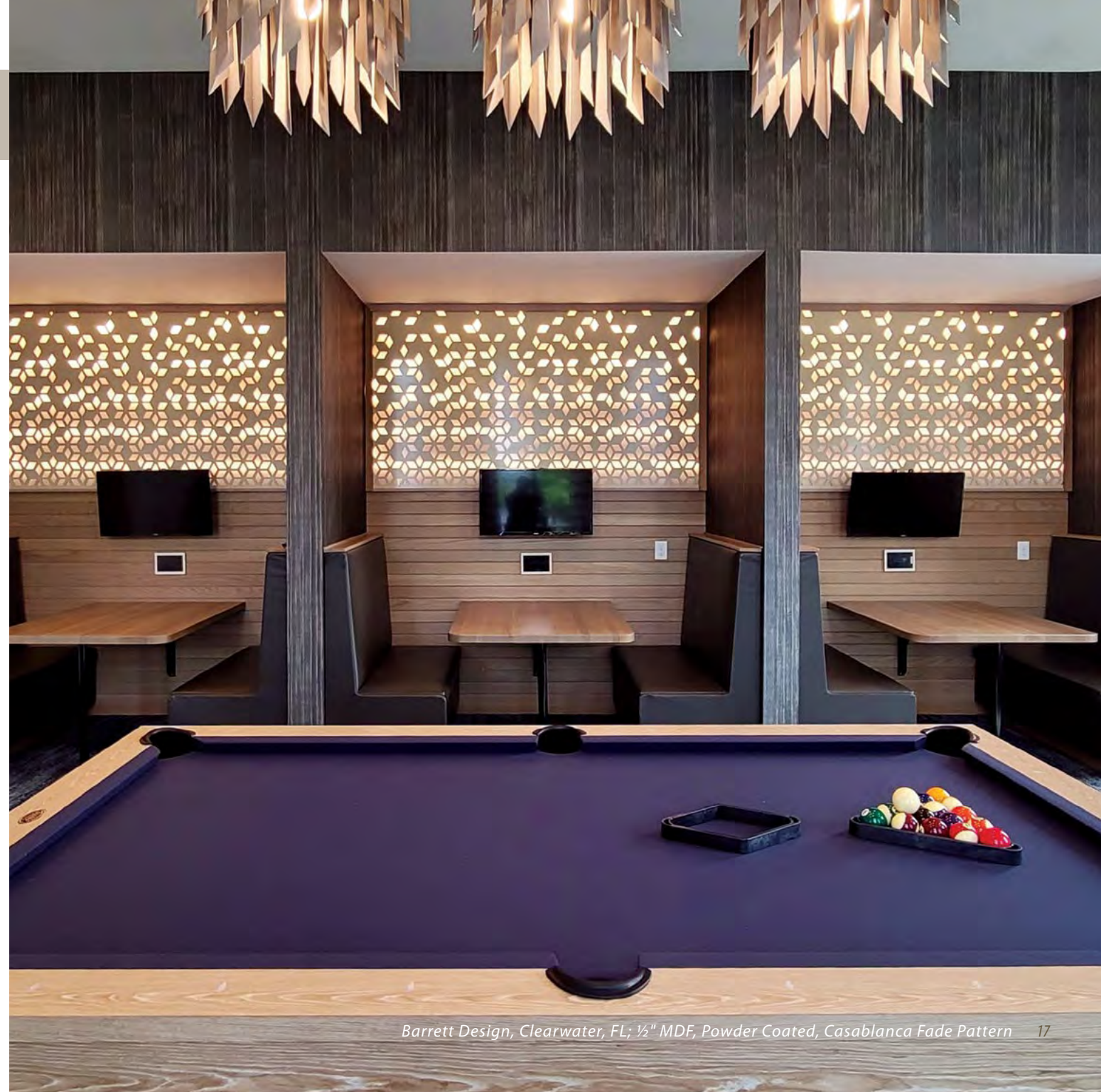
For more technical information regarding light boxes, please see page 98.



University of Michigan, Ann Arbor, MI; 12 gauge Steel Powder Coated Greystone Metallic, Custom Pattern

"Lightwave Laser is not only a place from which designers can find beauty and practical solutions for design challenges, they deliver beauty and solutions in the highest professional and timely manner. The entire staff will never disappoint you in any of your expectations."

— RITA HERRERA, THE GOLDEN DOOR



Barrett Design, Clearwater, FL; ½" MDF, Powder Coated, Casablanca Fade Pattern

CEILING



ISEC / Wincome USA, Westin Hotel, Anaheim, CA;
¾" White Oak, Custom Finish, Branches Pattern

Laser-cut ceiling and skylight coverings have been gaining popularity in the hospitality and design industry. It's easy to see why. The applications are endless when you consider the many combinations of pattern, color, size, placement and lighting. A laser-cut panel adds interest and texture, whether it is back-lit, used as a valance, wood stained, or painted. These eye-popping panels will be the center of attention, or create a finely-tuned ambiance — your choice!



Photo-Dianne Dallape West

Casi Cielo Restaurant, Z Space Design, Breezeway Stars Pattern



Ralph Lauren, Beverly Hills, CA; ½" MDF, Painted White, Wiseman Star Pattern

"Lightwave Laser provides a reliable combination of great design and excellent customer service. Their custom capabilities bring conceptual designs to life through their exemplary attention to detail."

—MICHAEL CAPE, TWIST MODERN



Erkiletian Development Company,
Canterbury Builders, Alexandria, VA; 21
½" Walnut, Coffee Stain Finish, Marrakech Pattern

WINDOW COVERINGS

Window coverings can be the most dramatic application for our laser-cut panels. As the light changes throughout the day, the shadows cast by your panel create a subtle area of visual interest. Not only are the panels used for decorative purposes, but they also provide privacy. It's important to consider sun and moisture exposure when choosing your panel's material, and we have solutions to fit these challenges.

*"The screens arrived and they are beautiful!
We love looking at them every day!"*

—CHRISTINA GABRIEL



Alchemy Arts Center, Santa Barbara, CA, ½" MDF
Moorish Leaves Pattern



Eclectic Home, New Orleans, LA; ¾" Maple, Painted White, Barcelona Pattern

"We are enjoying the panels that you created for our pantry so much. Everyone that tours the house comments on how beautiful they are. Thank you so much for your beautiful craftsmanship!"

--LAURA MILLER



Delta General Contracting, Little Sister storefront, Tarzana, CA;
¼" Outdoor MDF, Hexagon Puzzle Pattern

ROOM DIVIDERS



Caseo Kitchen and Design, Innovative Environments Nassau, Miami, FL;
1/8" MDF, Painted & attached to mirror, Custom Pattern



Dividing up a large space does not mean sacrificing beauty. Room dividers are an attractive yet versatile way of creating privacy or setting distinct locations in a large area. They can also be used to cover a less desirable room feature with a magnificent piece of functional art. Our panels can be either framed with molding or unframed.

"Received the Grills and all I could say when I opened the crate was "WOW". They are absolutely gorgeous, better than I expected. The material is top quality and the dimensions were right on. I'll definitely keep your business in mind for the future."

— MICHAEL GILMAN, SOUTH BEND, IN

STAIRWAY & DECK RAILINGS



Anu Kulkarni, residence, Portola Valley, CA; 10 gauge Steel, Powder Coated, Waterfall Pattern



Sierra Nevada Brewery, Asheville, NC; ½" Dark Walnut, Custom Pattern

Another unique design feature is to use our panels for deck or stairway railings which can be enclosed in a beautiful pattern that provides both safety and privacy. By using a plywood core for added strength, we can help you choose patterns that meet code restrictions on opening size and function. Please keep in mind not all patterns are suitable.

For projects which require added strength and safety, acrylic or polycarbonate can be added behind the laser-cut panel. This eliminates any potential problem with opening sizes in the artwork and adds increased impact resistance and strength.

"The panels have been installed and they are a real hit. Everyone says they are not only beautiful, but unique and creative as window coverings."

— FELIS DOMINGUES

CABINETS & FURNITURE



“Panels arrived as expected on Tuesday. They were perfect. Just as ordered: stain matched, flawless work, excellent packaging for shipping. Looks fabulous on the wall.”

— STEVE WAUSON,
CRAFTSMAN HOMES
OF AUSTIN

Incorporating laser-cut panels into your cabinetry or furniture design is an easy way to add a unique feel. Custom artwork can be created to match other elements on your project, or you can use one of our patterns. The ¼ inch laser-cut panel can be attached directly to your cabinet door as a decorative element. For a more open look, your contractor can frame it in to your project on its own or in front of glass. Panels can also be back-lit with LED lights. Our panels can be incorporated into furniture and cabinetry, and are frequently used in private residences, corporate work environments, and hotels.



Inkegnito, San Diego, CA; ¼" Maple, Painted, Crocus Spirals Pattern



Mortise & Tenon, Los Angeles, CA; ½" Maple, Gothic Grille Pattern



Vicki Blakeman Interiors, Newbury Park, CA; ¼" Alder, Custom Pattern

"They're spectacular, and as you will see, they make a grand statement with the custom Deco front door! Thanks for your great work!"

— STEVEN L. DAVIS

DECORATIVE

All of our panels are decorative, though sometimes a particular decorative element can enhance the whole room. Intricate and detailed patterns cut in metal or wood will create an eye-catching focus for your overall space. Select a pattern that will accentuate your existing decor. Choose a wood finish that complements your flooring or trim. Or, go with a trendy powder-coated metal panel to match your color scheme. Panels can be customized and made to fit into your space. There are no limits!



Carrie Darling Events, Marco Island, FL; 3/4" MDF, Painted, Sea Fan Pattern



Dorman Construction, Springfield, OR; 1/2" MDF, Painted, Custom Pattern

"Thank you for Lightwave Laser's superb craftsmanship and your excellent customer service. I couldn't be happier with my purchase."

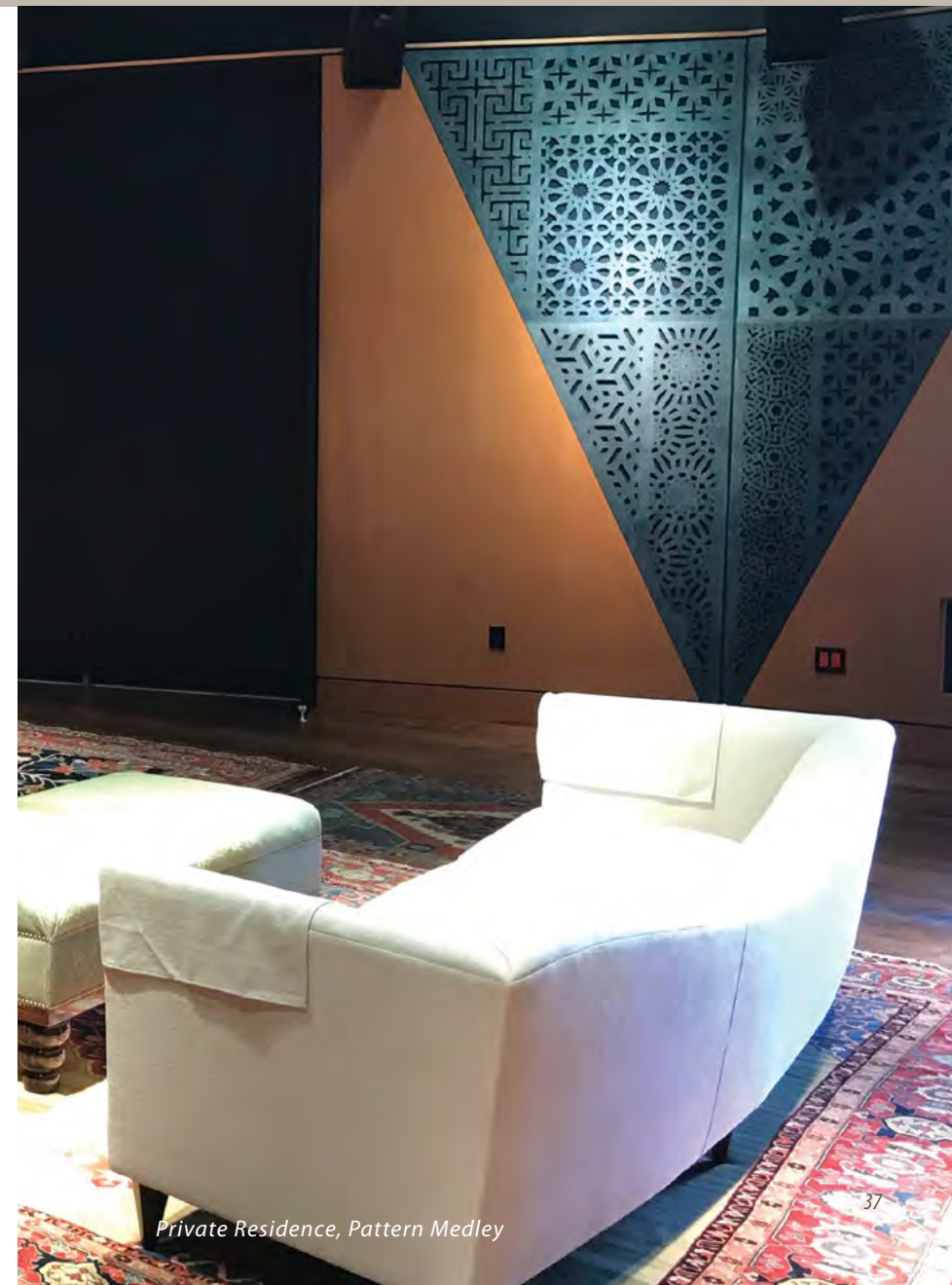
— ESTELLA YANEZ



Streamline Builders, Los Angeles, CA; ¾" MDF, Painted, Medina Pattern

"Thank you again for all your help with my laser cut panels. I absolutely adore them and am so at peace that they were the perfect solution across the board to the spaces in which I had them installed."

— PAIGE BOER



Private Residence, Pattern Medley



Best Events, Lolita & Gaspar, Los Angeles, CA; 1/2" Cherry, Tokyo Grille Pattern

SIGNAGE



The H Hotel, Midland MI; 3/4" Walnut, Custom Artwork

Alternative to conventional signage, laser-cut signs draw attention to your logo and company branding. Lighted signs optimize effect and visibility. Modern solutions include solar, battery power, or low voltage LED elements. Signs can also be constructed for both indoor or outdoor applications. We use an outdoor MDF which can be painted, or have a wood veneer applied to the outdoor MDF with outdoor-rated adhesive for an all-weather product.

"They worked perfectly to accomplish what we wanted and everyone is very pleased."

—JO HOHLBEIN

Ordering Options

Standard Size Panels

Our *Standard Size Panels* option is our most economical and speedy choice. We offer 9 sizes of panels which come in your choice of Lightwave Laser Patterns. You can also choose any of our stock wood and finish options. The ordering process is streamlined and lead time to ship is approximately 1-2 weeks.

STANDARD SIZE PANELS - SIZE CHOICES:

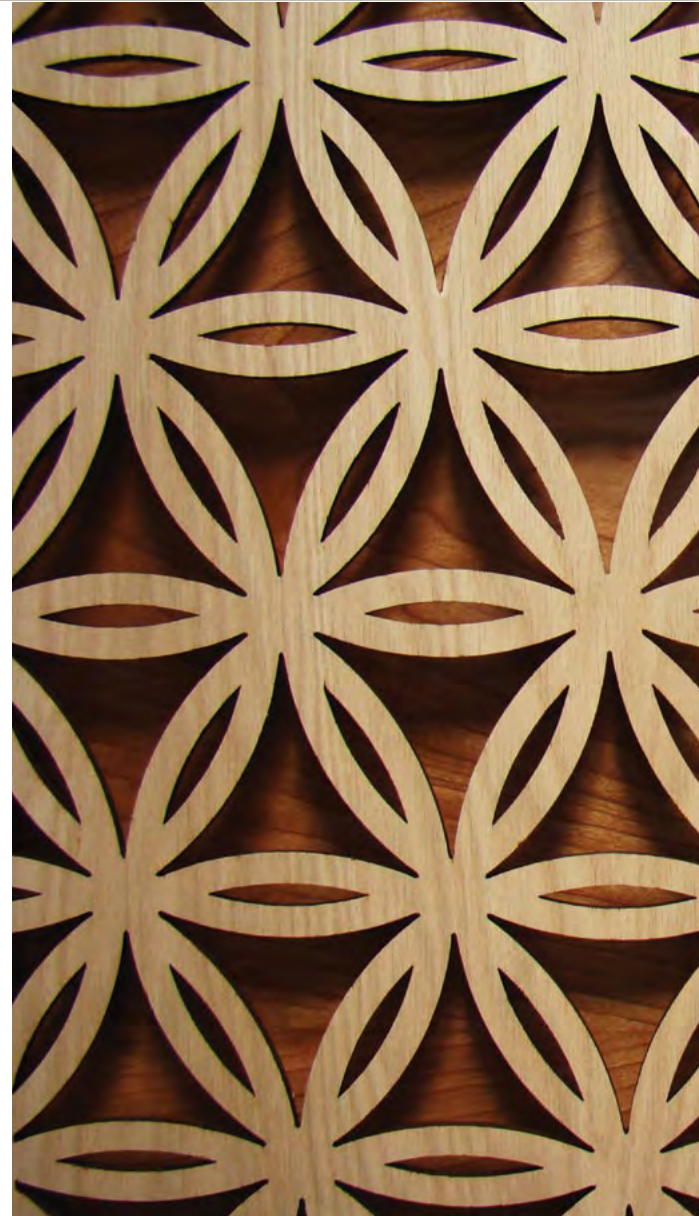
48" x 96"; 48" x 48"; 36" x 72"; 24" x 48"; 24" x 24";
23.5" x 35.5"; 15.5" x 76"; 11.5" x 31.5"; 11.5" x 11.5"

Custom Size Panels

Custom Size Panels option is similar to *Standard Size Panels* except you have your choice of panel size – up to 4' x 8'. You also have your choice of Lightwave Laser patterns, pattern scale, border size, and stock wood and finish options. Lead time is approximately 4 weeks.

Designer Panels

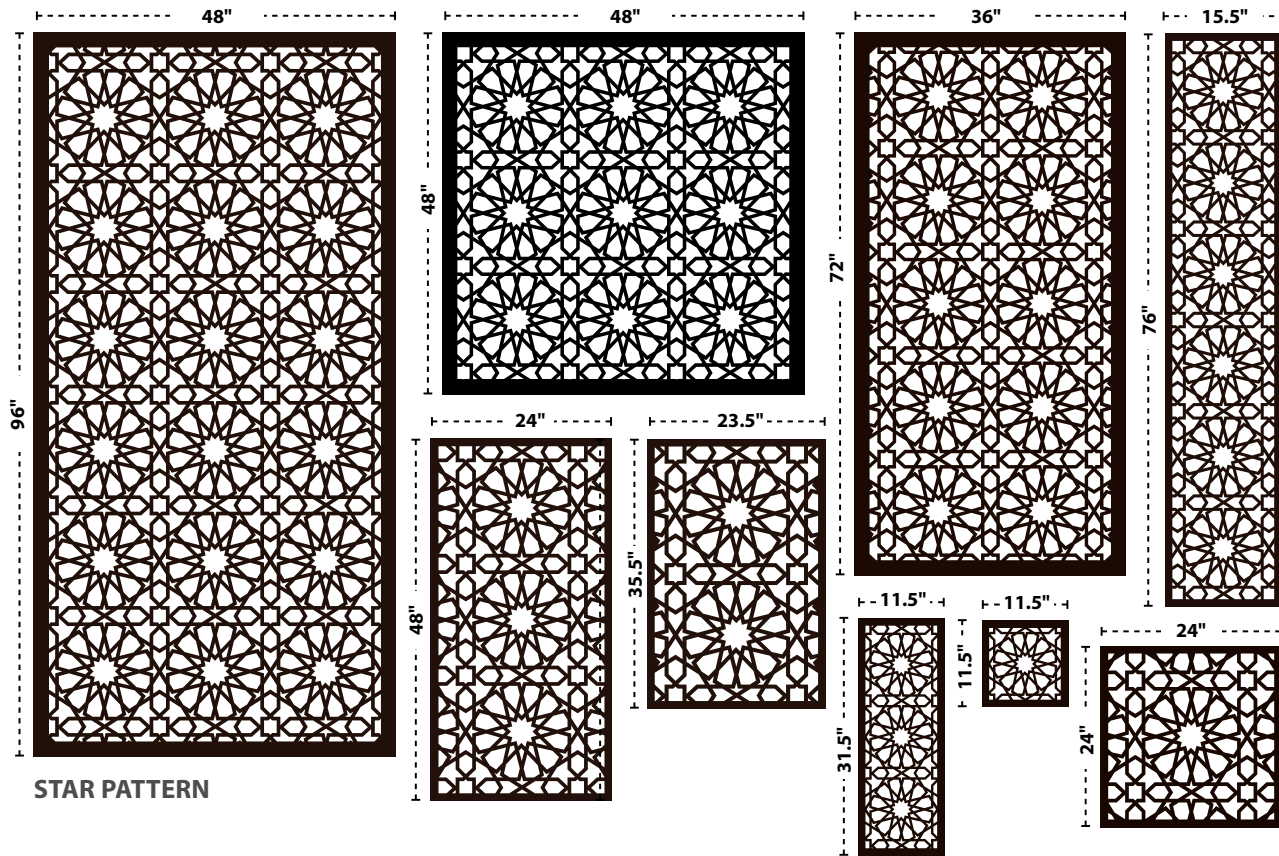
The *Designer Panels* Option allows for the most choices. This option allows you to choose a custom order material or a custom finish. There is more flexibility with the pattern such as border size, pattern scale, panel shape, and having the pattern be continuous across a group of panels. You can choose a custom pattern by sending us a file you've created, or working with our team to create one. Panel size can be up to 5' x 10'. Light box construction and the addition of molding are also available with this option. Lead time varies depending on the scope of the project but can range from 4-12 weeks.



	Standard Size Panels	Custom Size Panels	Designer Panels
APPROXIMATE LEAD TIME	1-2 WEEKS	3-5 WEEKS	4-12 WEEKS
APPROXIMATE PRICING	20% less than Custom Size		20% more than Custom Size
SIZE			
9 Standard sizes	✓		✓
Any size up to 4' x 8'		✓	✓
Any size up to 5' x 10'			✓
PATTERN			
Lightwave Laser Pattern	✓	✓	✓
Custom border size		✓	✓
Custom pattern scale		✓	✓
Custom artwork			✓
Artwork continuous across panels			✓
MATERIAL			
Stock materials	✓	✓	✓
Custom order materials			✓
FINISH			
Stock Finishes	✓	✓	✓
Custom Finish			✓
ASSEMBLY - molding, dowel pins, light box, custom shapes			✓
LIGHT BOX			✓
METAL			✓

Standard Size Panels

Illustrated on these pages are examples of all panel sizes available with the **Standard Size Panels** option, shown using two Lightwave Laser patterns: Star Pattern, and Ice Dreams. With this option, you can choose any of our 208 patterns, any of our stock finishes, and stock materials in 1/2" or 3/4" thicknesses.



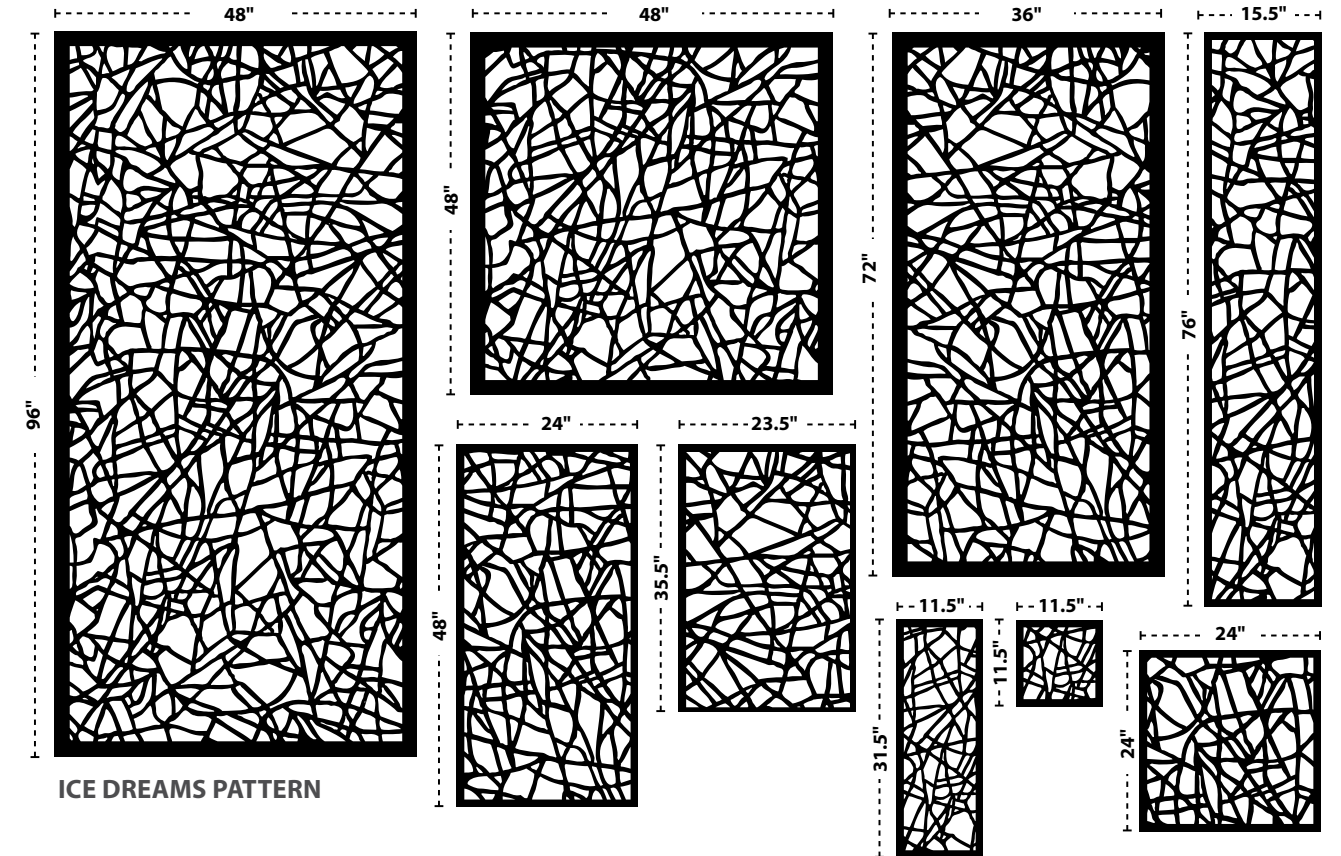
Stock Materials available in Standard Size Panels:

- Unfinished Alder
- Unfinished Maple
- Unfinished Walnut
- Unfinished Rift-Cut White Oak
- MDF
- Outdoor MDF

Stock Finishes available in Standard Size Panels:

- Powder Coat clear finish on Wood veneer
- Powder Coat clear finish on Stained wood veneer
- Color or Metallic Powder Coat on MDF or Outdoor MDF

See more about finishing on Page 52.



MATERIAL

Over the years, we have expanded the materials and finishes available for your project. Material availability falls into three different categories.

STOCK MATERIALS

We carry inventory on our most commonly used materials. These stock materials have the advantage of reducing the lead time for your project. They also are economical, and are less complex compared to special ordering more exotic materials. We carry the following materials in stock, in a variety of different thicknesses:

- MDF
- Outdoor rated MDF
- Unfinished Alder veneer on MDF core
- Unfinished Walnut veneer on MDF core
- Unfinished Maple veneer on MDF core
- Unfinished Rift Cut White Oak veneer on MDF core

CUSTOM-ORDER, COMMONLY AVAILABLE MATERIALS

The next category is material that is special-order but fairly easy to purchase. Typically, this material has a lead time of 3-5 weeks which happens in parallel with the art/ proof process. These items include:

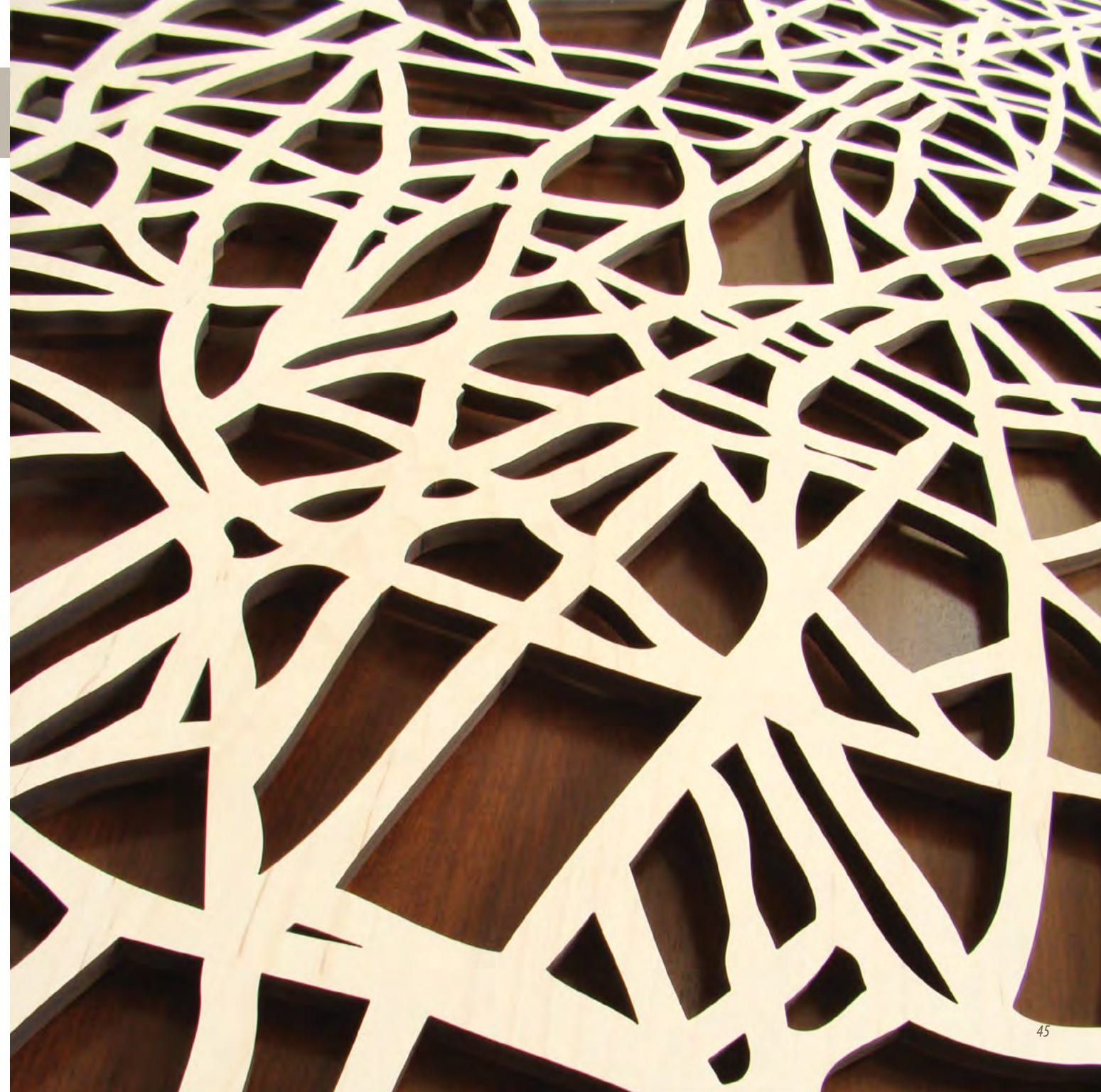
- Fire-rated MDF
- Common veneers on fire-rated MDF
- Common veneers on outdoor-rated MDF
- Common veneers on plywood
- Other veneers such as Alder, Cherry, Poplar, Mahogany

UNCOMMON CUSTOM-ORDER MATERIALS

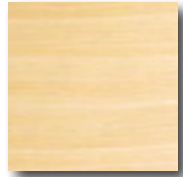
This includes items like certain engineered veneers, FSC-certified materials, and anything not carried by our regular vendors. Lead times on these materials are typically 4-8 weeks.

FINISHES

The most common finishes are described on the following pages. In addition to the powder-coating and stain options, we have the ability to finish with some metallic and pearlescent paints. Please contact us for more information on paint options.

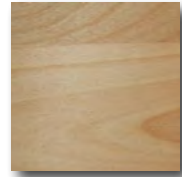


STOCK MATERIAL



UNFINISHED MAPLE

Maple veneer is suitable for painting, or staining a light color, and is slightly stronger and easier to paint than MDF without the veneer.



UNFINISHED ALDER

Alder veneer is very similar to Maple but slightly darker, and works well if you are staining a medium or dark color.

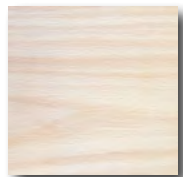


UNFINISHED WALNUT

Our Walnut veneer has a beautiful woodgrain, and is suitable for staining or applying a clear coat to bring out its natural features.

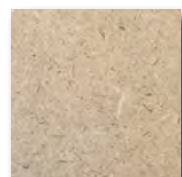


MDF Medium-Density Fiberboard is our most economical choice. Its surface is smooth, uniform, dense and free of knots or grain patterns. It makes a superb carrier for veneers, and can be painted, but not stained.



UNFINISHED RIFT-CUT WHITE OAK

OAK White Oak veneer varies from pale yellow to brown, and can be mottled with gray. The grain is very straight with long rays. It's a great choice if your project requires dense, strong and durable wood.



OUTDOOR MDF Excellent choice for outdoor use. This MDF is made using heat and pressure-treated material with non-toxic materials. It's waterproof, adheres paint easily and has an impressive fifty-year warranty.

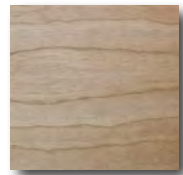
Stock Materials	1/8"	1/4"	3/8"	1/2"	3/4"	Maximum Size
Unfinished Maple		✓		✓	✓	5' x 10'
Unfinished Walnut		✓		✓	✓	5' x 10'
Unfinished Rift-Cut White Oak		✓		✓	✓	5' x 10'
Unfinished Alder		✓		✓	✓	5' x 10'
MDF	✓	✓		✓	✓	5' x 10'
Outdoor MDF		✓	✓	✓	✓	4' x 10'



Luke Brothers Custom Homes, Port Charlotte, FL;
3/4" MDF, Powder Coated Metallic Silver, Custom Pattern

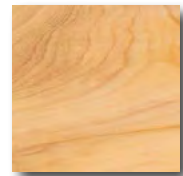
CUSTOM ORDER MATERIAL EXAMPLES

EXAMPLES OF WOOD AVAILABLE AS CUSTOM ORDER



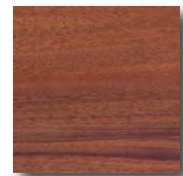
UNFINISHED CHERRY

Our Cherry veneer has a woodgrain that is varied. The color is a rich, reddish brown. Cherry develops a darker color over time. Domestically grown.



UNFINISHED CYPRESS

Cypress wood is an appealing light, yellowish brown. The grain varies and it has a medium to coarse texture.



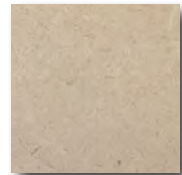
UNFINISHED AFRICAN MAHOGANY

African Mahogany is a beautiful light to deep reddish-brown color. Grain is straight to interlocked.



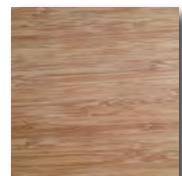
UNFINISHED MAPLE - PLY CORE

If extra strength is needed, using a ply core rather than MDF works well. The Maple veneer is identical to the Maple with MDF core choice on page 46.



PROCORE

Procore has a ply interior with thin MDF on the exterior. This results in a very strong material that can also be powder-coated.



UNFINISHED BAMBOO - PLY CORE

Bamboo is a fast-growing, sustainable wood choice and the ply core is extremely strong. It can be stained or clear-coated and is also beautiful if left unfinished. Thickness: 1/4"

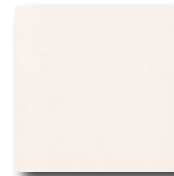


FIRE-RATED MDF Fire-rated MDF is a sustainable Class 1 retardant-rated fiberboard. It can be sanded and painted without diminishing its fire retardant qualities. Thickness: 1/8", 1/4", 1/2", 3/4"

BACKING MATERIAL - Custom Order

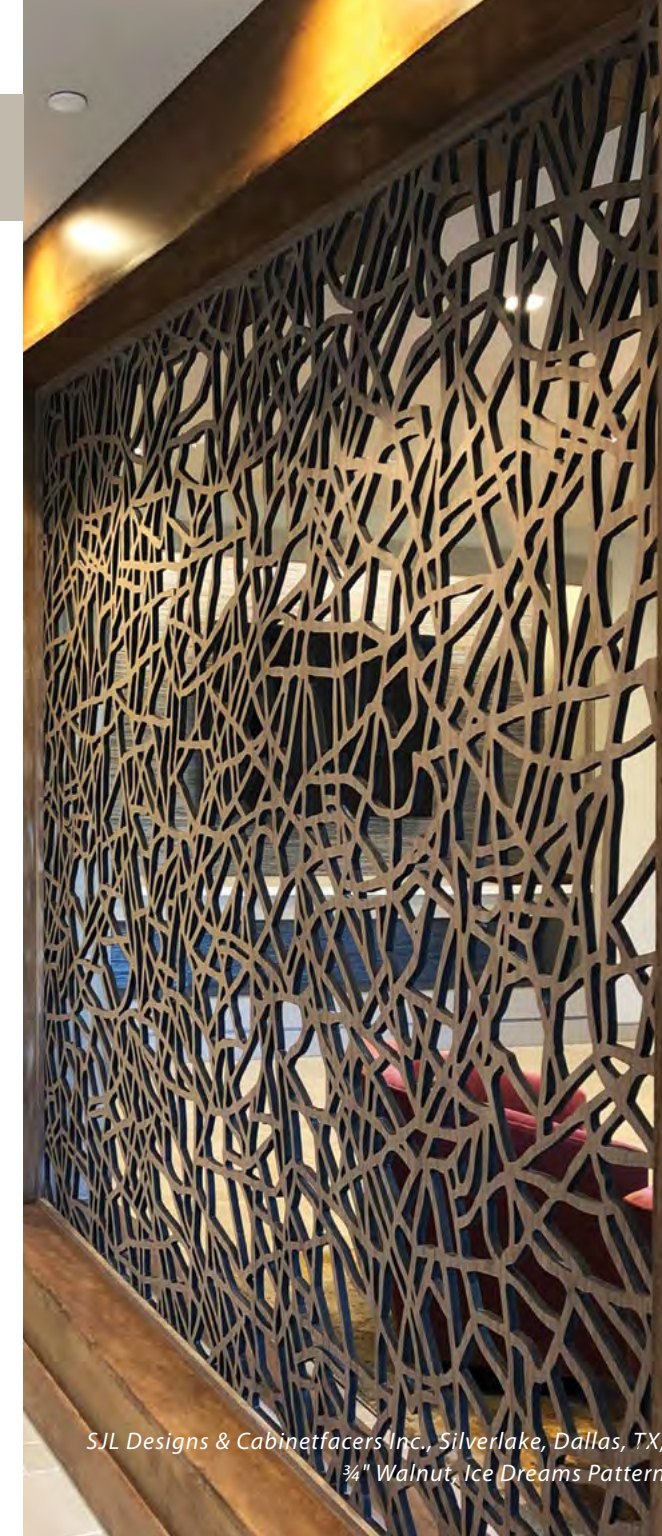


ACRYLIC Acrylic is available as a special order in various colors and degrees of transparency. It can be laser-cut or used as a backing material. Various thicknesses and colors available



LIGHT-DIFFUSING ACRYLIC

This acrylic diffuses light well and has a uniform, frosted look. It has a matte appearance on one side and is shiny on the other. Thickness: 1/8"; Also available in other thicknesses.



METAL



Metal is a great material for certain applications. Compared to wood, it's stronger, much thinner, well-suited for outdoor use, and can be finished in an extremely large variety of powder-coating options. Our most common *steel* material thicknesses are 10, 12 and 14 gauge, or in inches, 0.141", 0.109" and 0.078". In *aluminum*, our most common thickness is 0.25", although other thicknesses are available. Steel and aluminum material comes in sheets up to just under 5' x 10'. Unlike wood, metal can be bent or rolled after laser cutting! This can make for some interesting and unique pieces.

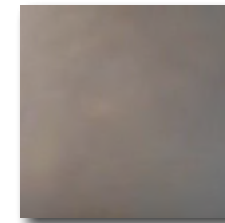
The laser-cutting process introduces heat into the metal, and with that, creates additional technical considerations when cutting certain patterns. Some patterns are too intricate or leave narrow lines and additionally can get too hot and warp. Please contact us if you are unsure about the pattern you have chosen in regard to using metal.

All steel should be powder-coated, unless you want a naturally rusted finish. Aluminum can be left unfinished or powder-coated. For projects near salt water, aluminum should be used.

*Andy Lees, Private Residence, Bellevue, WA;
10 gauge Steel, Powder Coated, Waterfall Pattern*

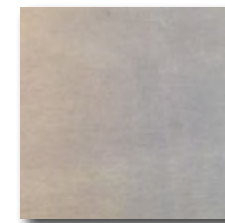


Metal and Aluminum are excellent choices for high moisture projects such as a spa, bathroom or garden. They are often used to add privacy to decks, as customized art on the outside of religious institutions or buildings, and at outdoor hotel spaces with bars, restaurants, and lounges.



COLD ROLLED STEEL

A versatile alternative for both interior and exterior applications. Finish with UV stable powder-coating to showcase an array of colors and textures.



ALUMINUM

Another perfect choice for exterior use, relatively lightweight, and can be installed outdoors without powder coating.

	<i>Gauge</i>	<i>Inches</i>
COLD ROLLED STEEL	10	0.141"
	12	0.109"
	14	0.078"
ALUMINUM		1/4"
		3/16"
		1/8"

FINISHING OPTIONS WOOD VENEER

WOOD VENEER

Using a wood veneer on an MDF core allows finishing which can highlight the wood grain. You have the option of staining the wood or not.

VENEER FINISHING OPTIONS

- **Powder-Coat Clear finish on UNFINISHED veneer**
Unfinished wood veneer is Powder-Coated with a clear finish. Our stock veneers include: Maple, Walnut, Alder and White Oak.
- **Powder-Coat Clear finish on STAINED veneer**
Your choice of our 4 stock stain colors is applied by hand to one of our 3 stock veneer choices, then the panels are Powder-Coated with a clear finish.

Stock Stain Colors are illustrated on page 53.

Free samples are available and can be ordered on the website in the samples section.



STOCK WOOD STAIN COLORS FOR WOOD VENEER

STAINING WOOD VENEER - Stock Wood Stain with Powder-Coat Clear finish

We offer four stock stain colors, which are applied to three stock wood veneers — Alder, Walnut and White Oak. In addition, Maple can be applied with a clear powder-coat to achieve a light color. Stains are hand applied with gel stain, then finished with clear powder-coat for a final product that's ready for installation.

Note that the colors shown below are approximate representations of these colors. **We strongly encourage you to request stain samples for better color accuracy.**

ALDER				
	Alder - Black	Alder - Gray	Alder - Coffee	Alder - Honey
WALNUT				
	Walnut - Black	Walnut - Gray	Walnut - Coffee	Walnut - Honey
RIFT CUT WHITE OAK				
	White Oak - Black	White Oak - Gray	White Oak - Coffee	White Oak - Honey



MDF, STEEL & ALUMINUM

We have improved our metallic powder coat colors for MDF, and are industry leaders in powder coating MDF panels.

STOCK POWDER COAT COLORS

We offer 12 stock powder coat colors for MDF, Steel or Aluminum. These stock colors include eight metallic colors and four solid colors. Please request a sample before finalizing a stock color selection—there are small variances in color depending on the material. In addition, the printed and online images do not show the actual color variances depending on lighting and angle.

Stock powder coat colors are shown on page 55.

SPECIAL ORDER POWDER COAT COLORS

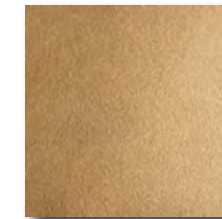
In addition to stock colors, there are thousands of colors available for special order. Special order colors are available with a minimum order quantity of 30 square feet for steel and aluminum, and 200 square feet for MDF. There is a charge for special order samples, and not every color option is possible.

Please contact us for more info.

Powder Coating is a durable, environmentally friendly coating appropriate for all environments including exterior and salt water mist. It is typically less expensive than paint, and is higher performance. The powder is sprayed on electro-statically, and then cured at 250 to 400 degrees.

The colors shown below represent our stock powder coating colors and are available for ½ and ¾ inch thick MDF, and all thicknesses of steel and aluminum.

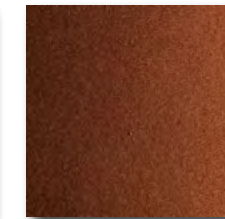
Free samples are available and can be ordered on the website in the samples section.



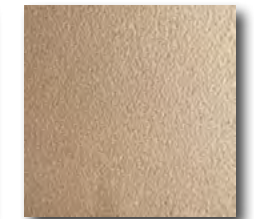
Gold



Bronze



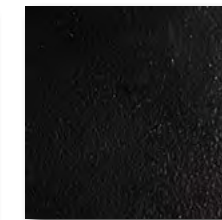
Copper



Warm Silver



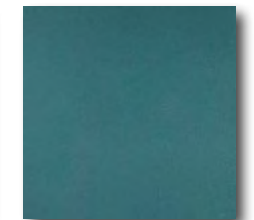
Silver



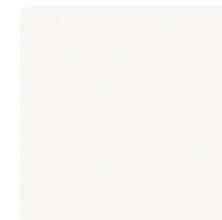
Black



Graphite



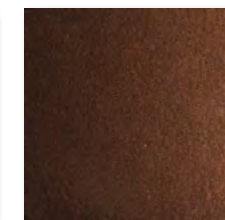
Sage



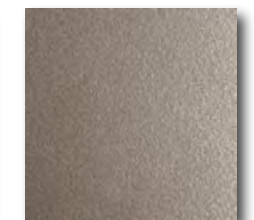
White



Warm White



Rootbeer



Pewter

NEW 2023 PATTERNS

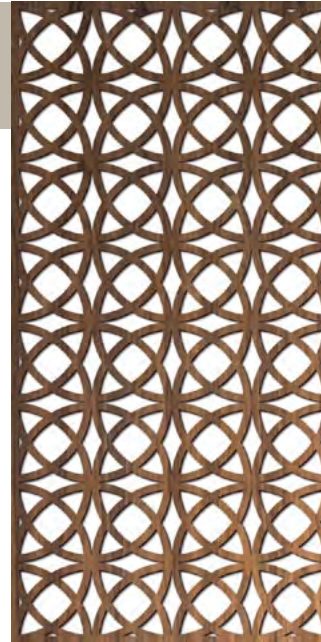
Showing 4' x 8' PANEL SIZE

Our art department maintains an extensive library of work, featuring patterns inspired by clean natural lines and dramatic geometry from around the world. We can modify our patterns to meet your needs or create a custom pattern using your inspiration. Our staff will work with you throughout the quoting, proofing, and manufacturing process, ensuring your project exceeds all expectations.

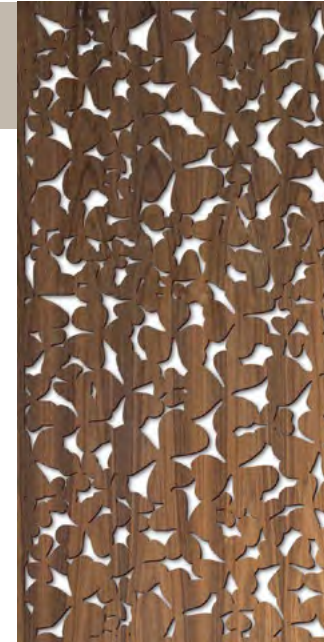
Because patterns are all uniquely built, they don't always fit perfectly within given dimensions at their standard scale. We can make minor adjustments to the scale, to present the pattern in the most aesthetically pleasing way. You will receive a detailed proof illustrating how the pattern fits on your panel.



Ancient Vines



Circles Overlap



Clover



Deco Vines



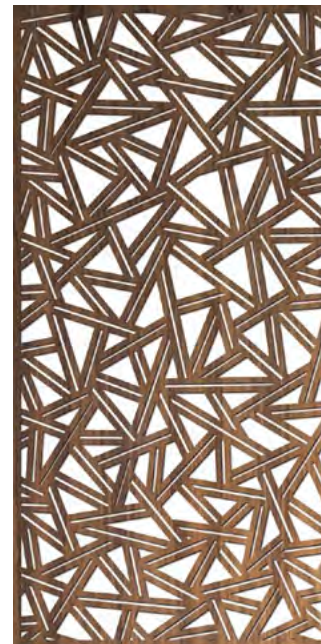
Art Deco



Austin



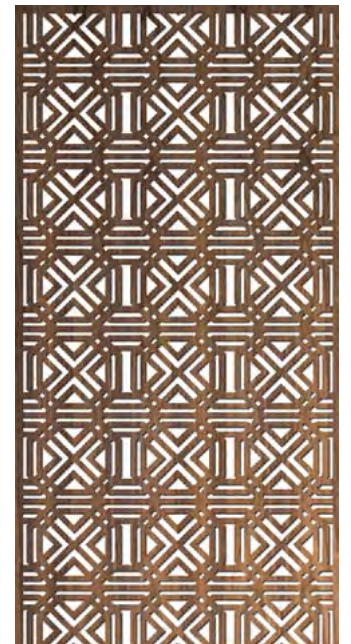
Braids and Circles



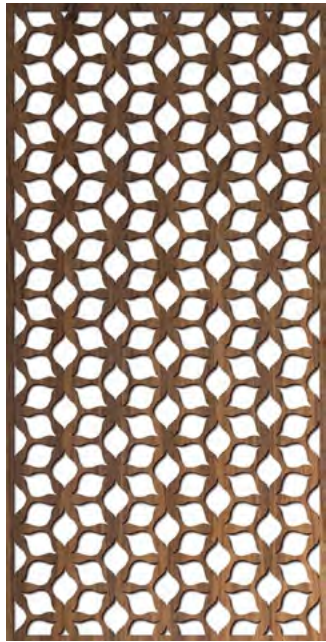
Double Line Mosaic



Flower Mosaic



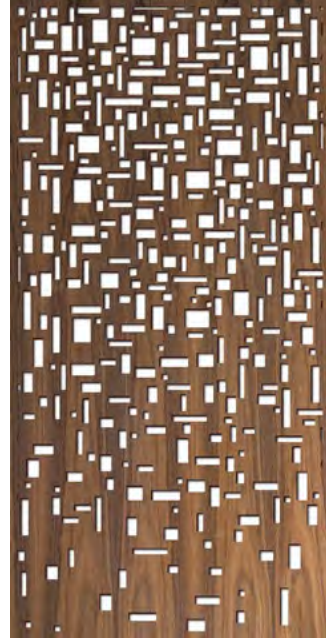
Granada



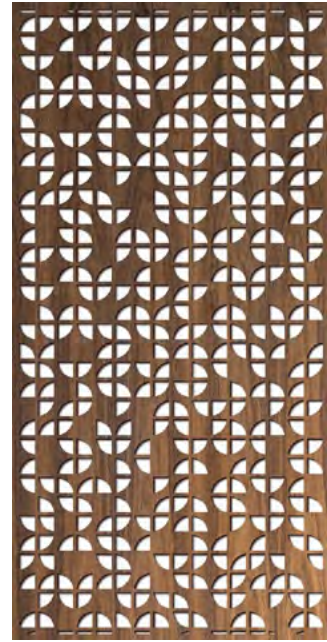
Hana Hex



Italian Stonework



Laurel Canyon Fade



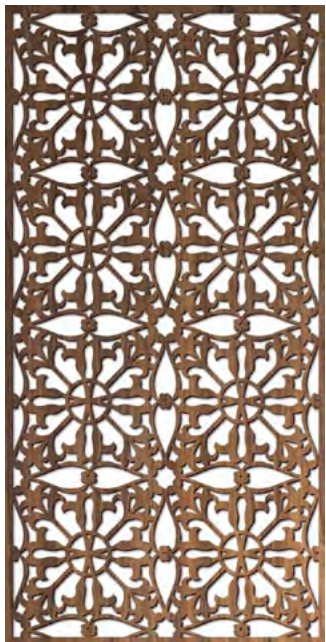
Quarter Round



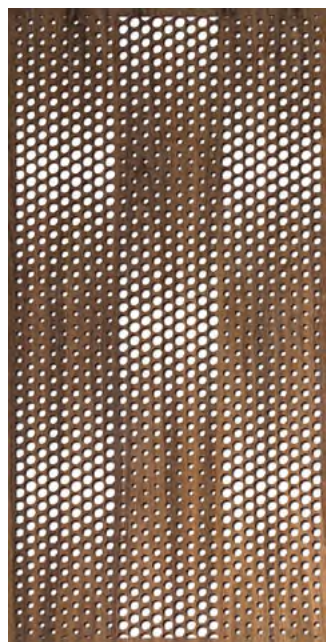
Rounded Mosaic



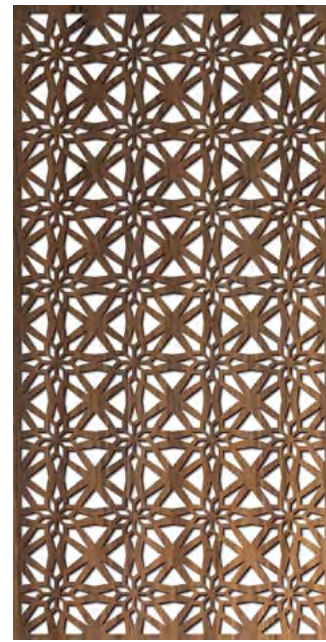
Stylized Branches



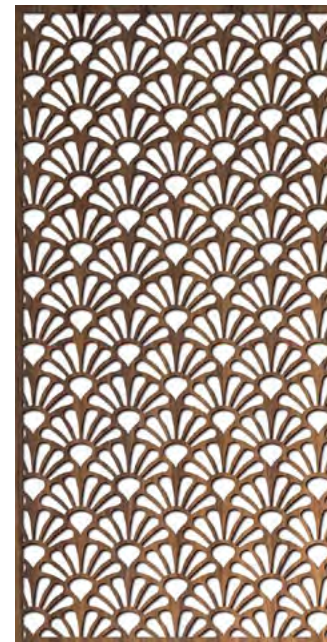
Lily Tiles



Melbourne



Modern Moroccan



Sunburst



Swirly Mesh



Tel Aviv

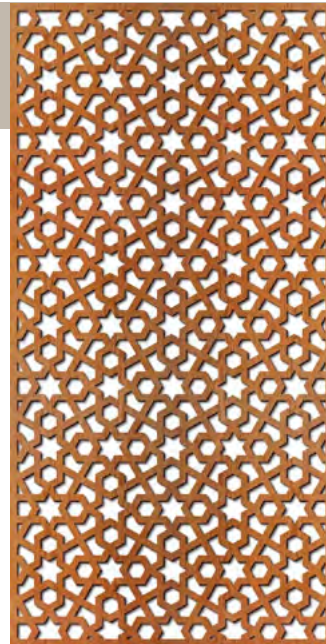
LIBRARY OF PATTERNS

Showing 4' x 8' PANEL SIZE

A selection of patterns at Standard Scale

Shown on these pages are a selection of our patterns at standard scale, and formatted in 4' x 8' size. Our wide variety of pattern styles vary as far as intricacy and spacing. Any of our patterns can be formatted as a 4' x 8' size panel. And the SCALE of each pattern can be increased for a larger look.

To see complete Library of 208 Patterns visit:
www.lightwavelaser.com/library-of-patterns



Arabic Stars



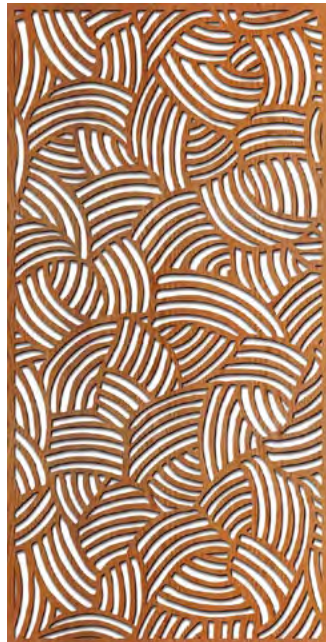
Batik Swirls



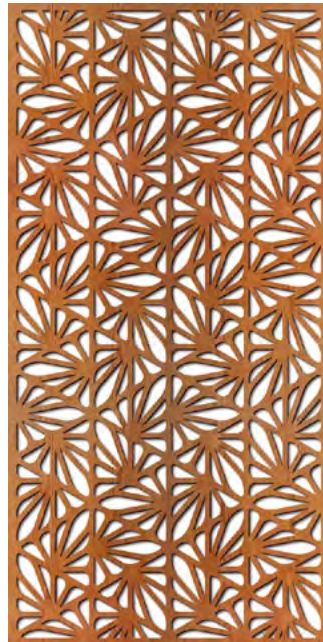
Braids



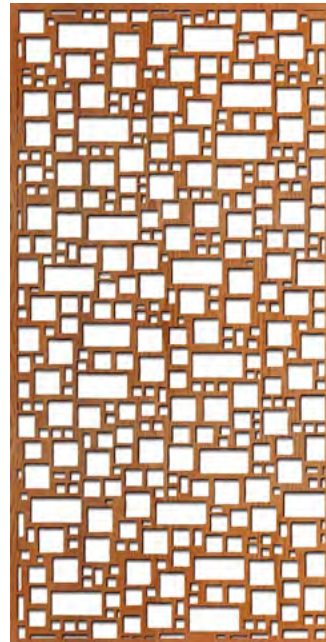
Branches



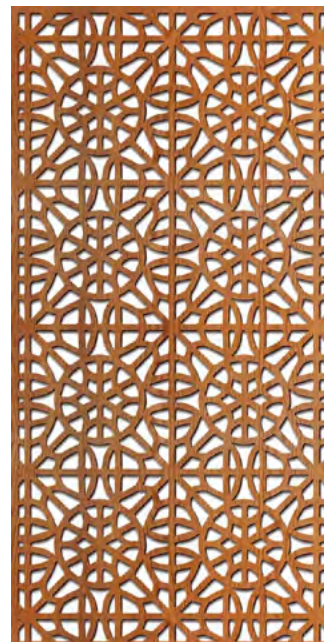
Arches



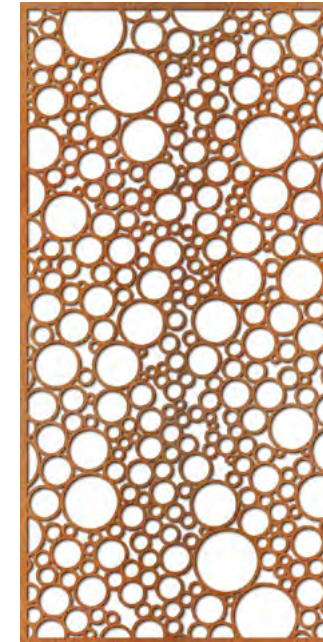
Atlantis



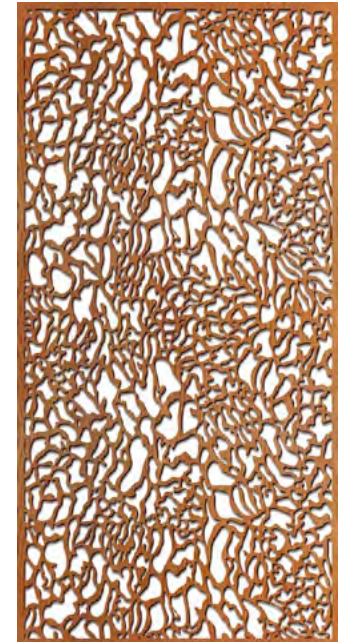
Barcelona



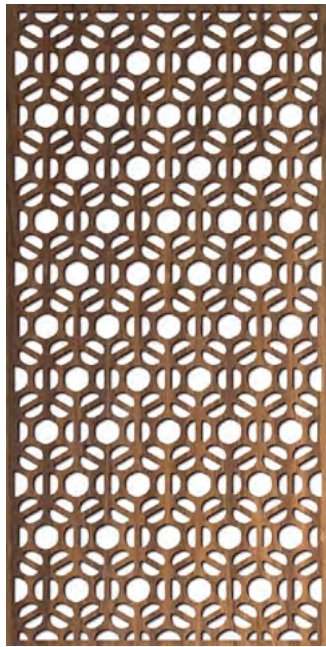
Brooklyn



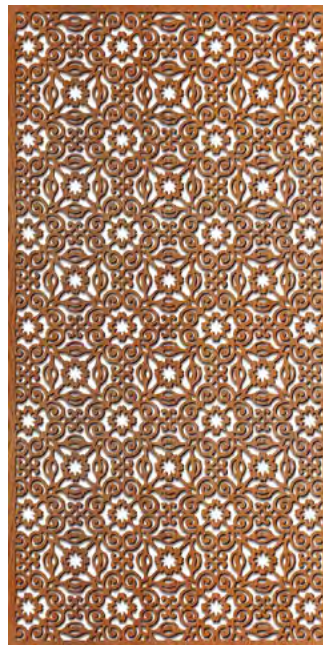
Bubble Bath



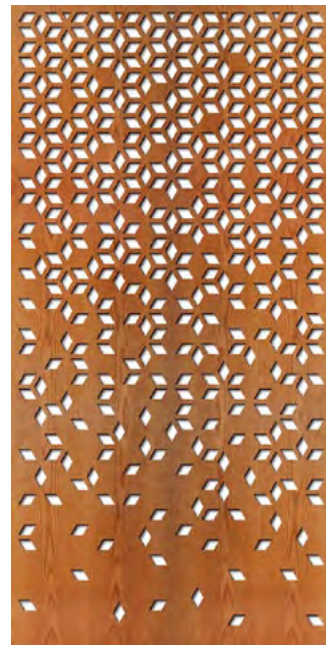
Canoe



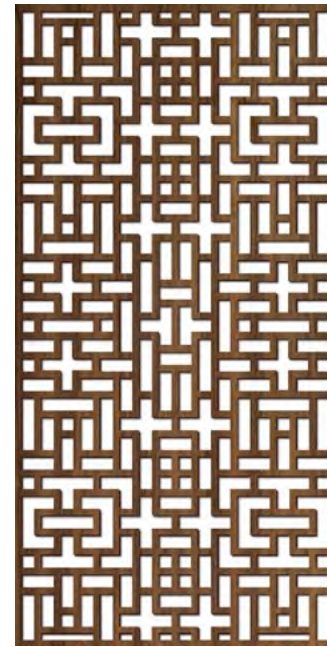
Canton Grille



Carmel



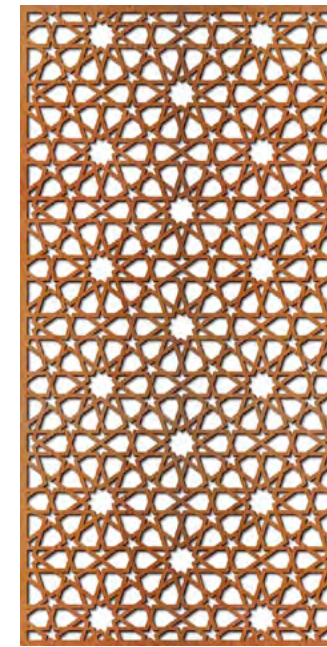
Casablanca Fade



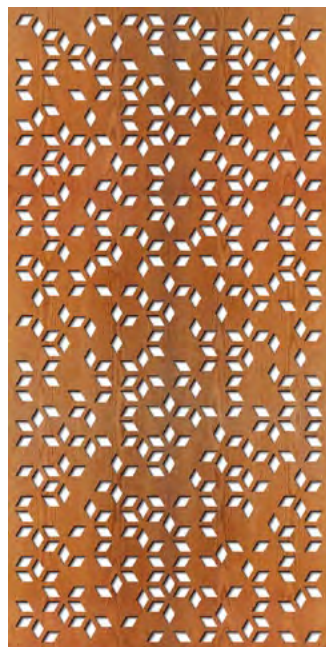
Chinese Lattice



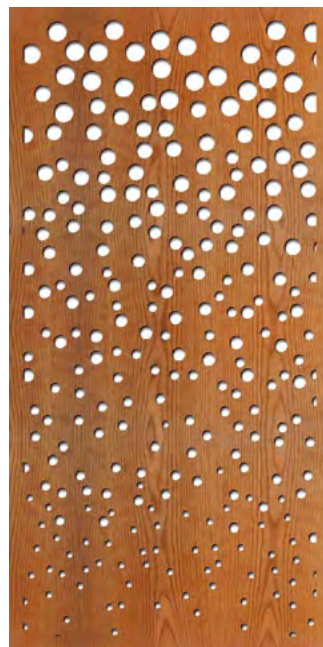
Dakar



Damascus



Casablanca Remix



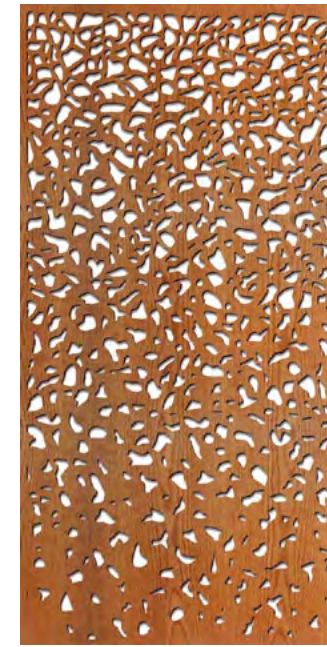
Champagne



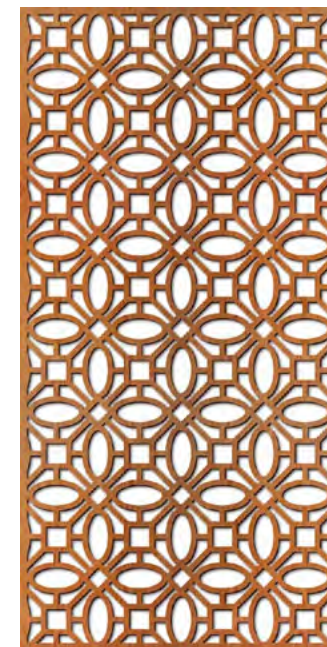
Chantilly Lace



Damask



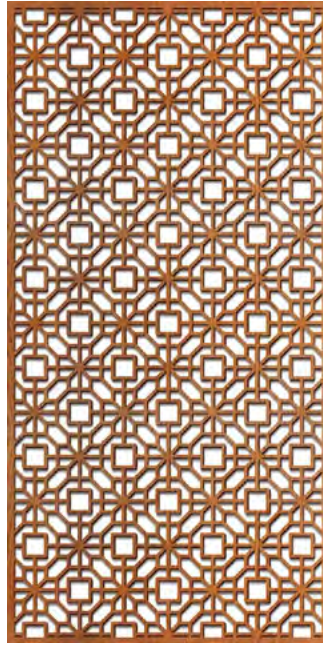
Dappled Light Fade



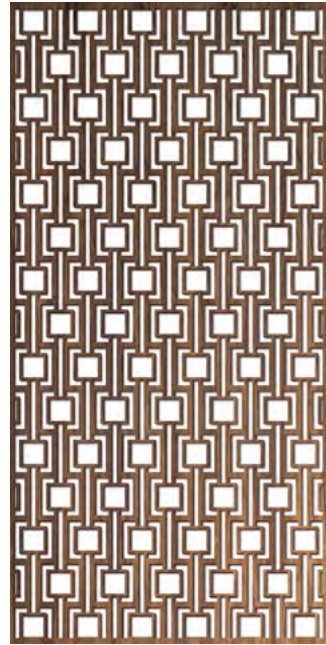
Dogwood



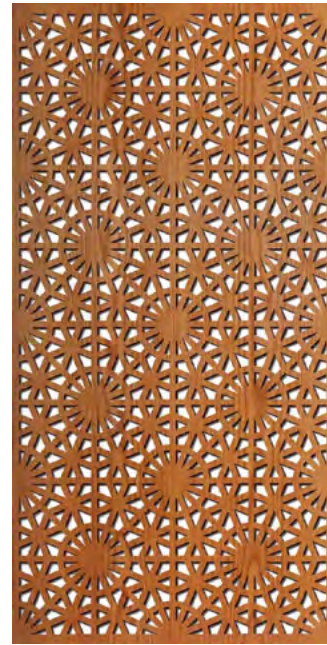
Double Diamond



Eastern Blossom



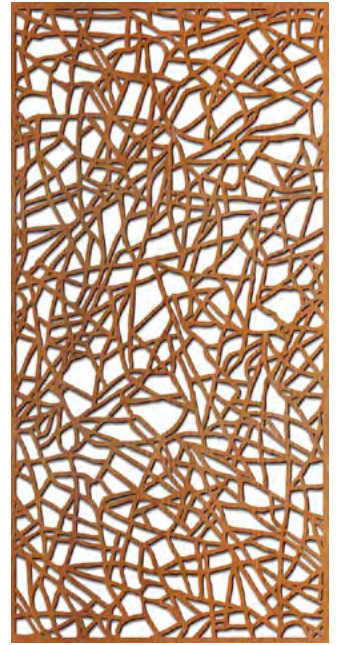
Fifth Avenue



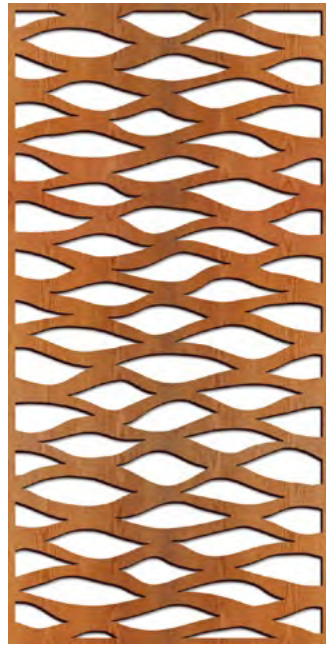
Hartman



Hourglass



Ice Dreams



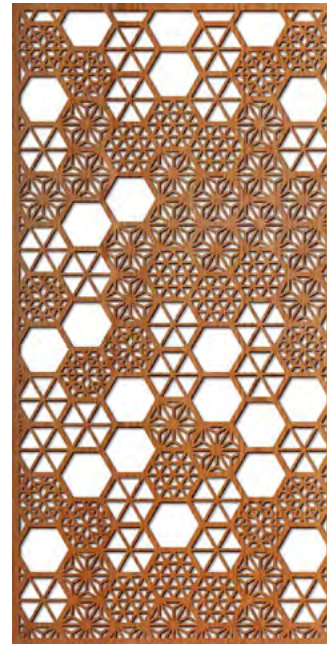
Flowing Water



Garden Fantasy



Gatsby Arches



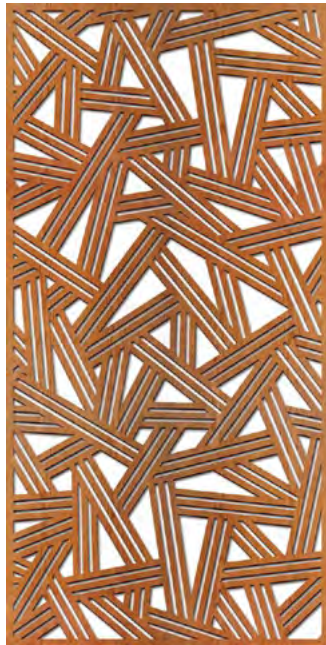
Kumiko



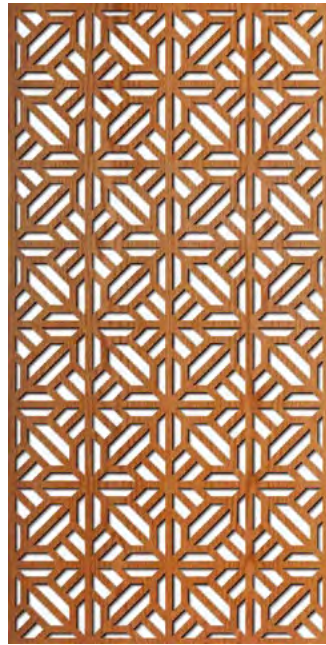
La Jolla



Leaf Columns



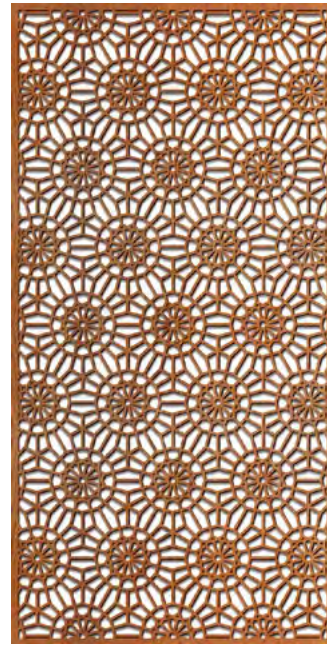
Line Scatter



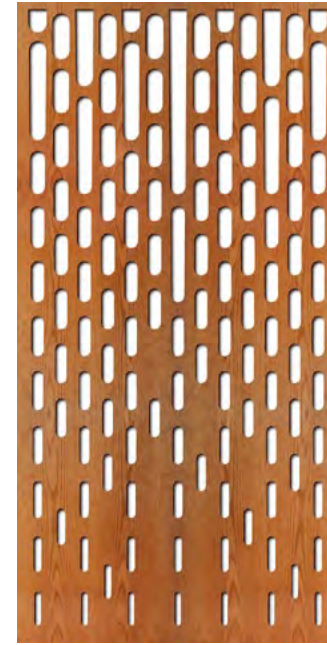
Lisbon



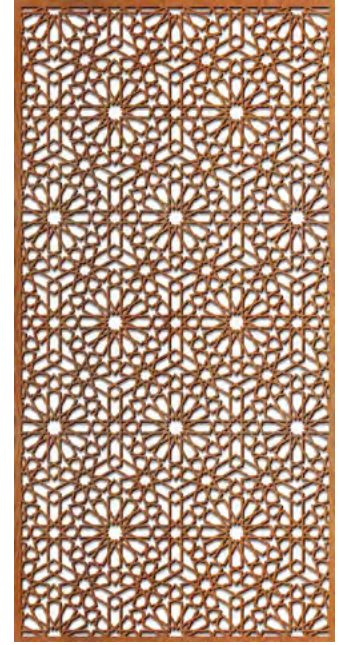
Lotus



Marrakech



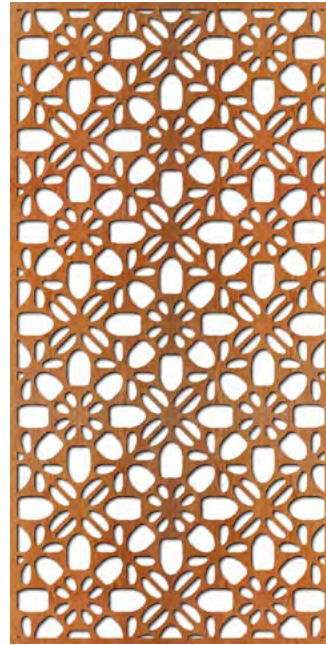
Matrix Fade



Medina



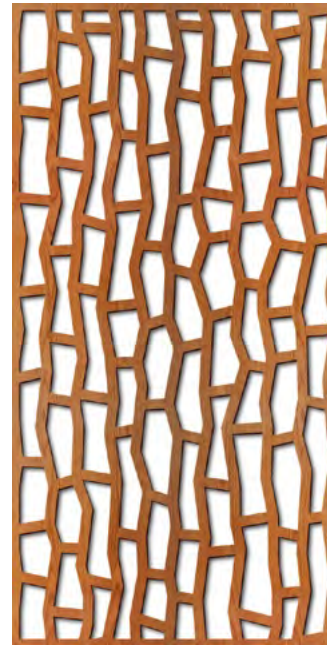
Magnolia



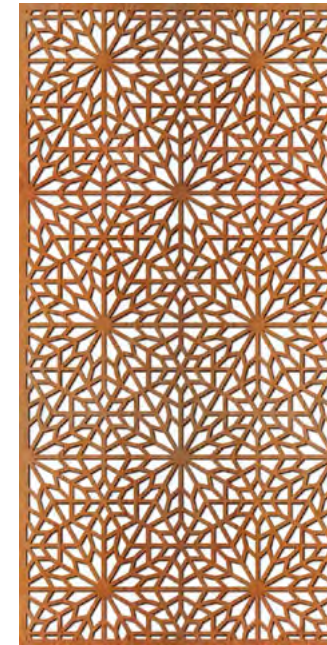
Malibu



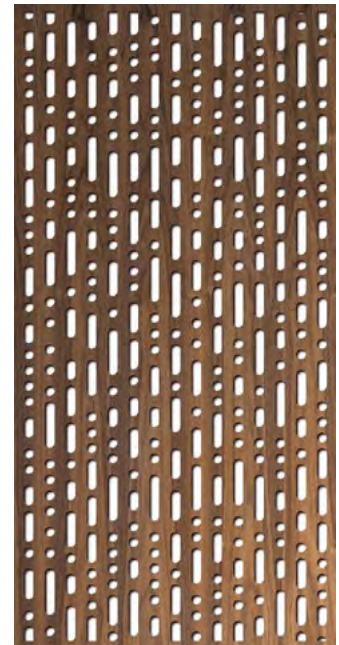
Many Flowers



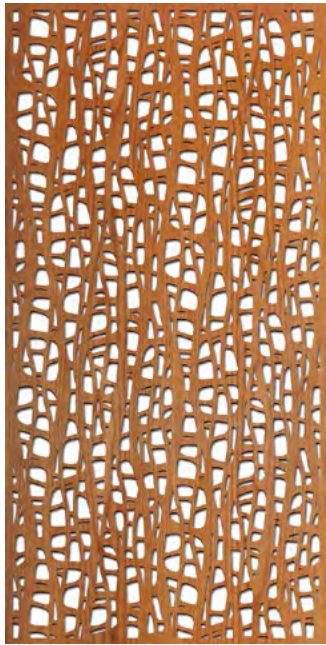
Modern Stonework



Morocco



Morse



Moss



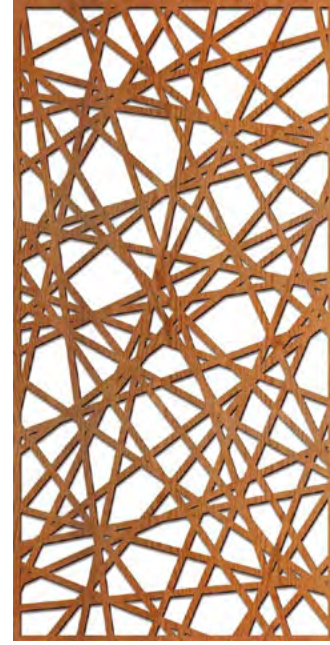
Mums



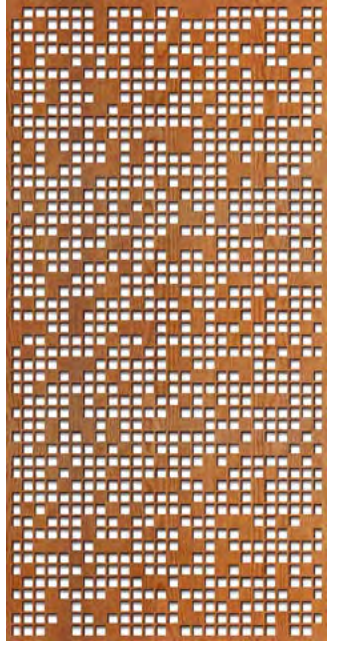
Nairobi



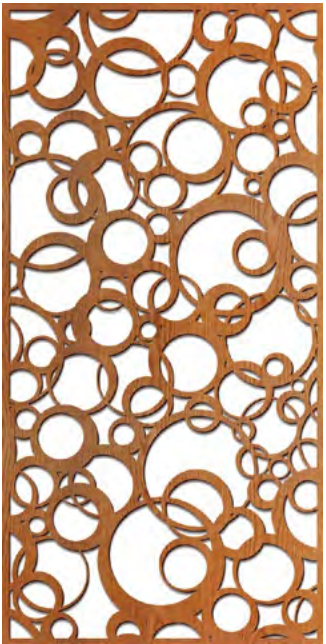
Oslo



Palomar



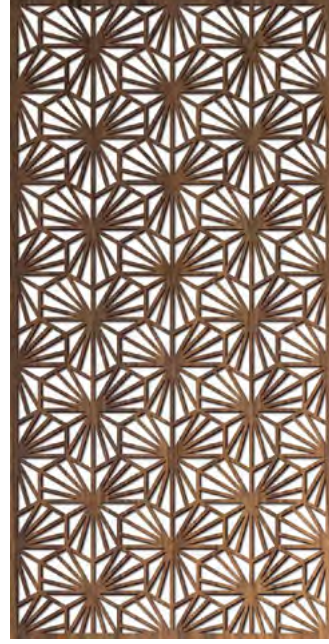
Pixel



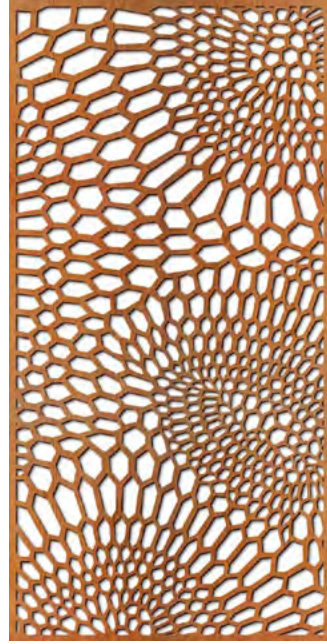
Offset Circles



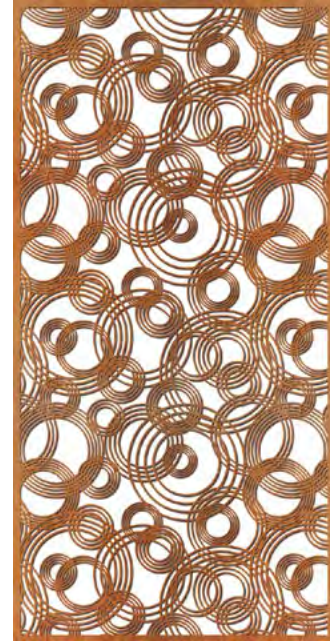
Ornate Damask



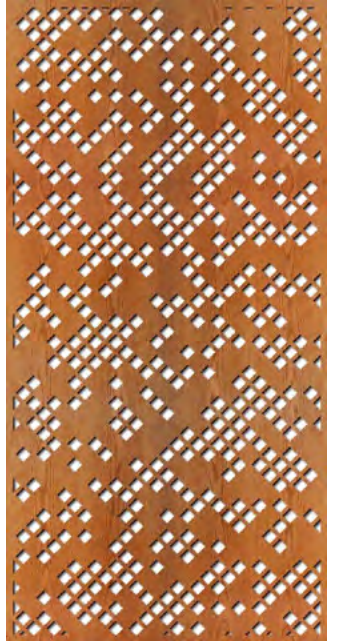
Osaka Flower



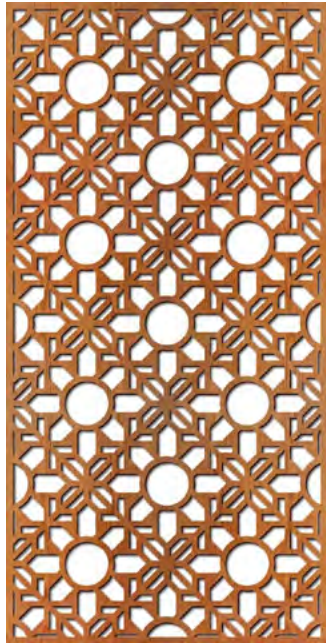
Poseidon



Rain on Water



Rochester



San Diego



Santa Rosa



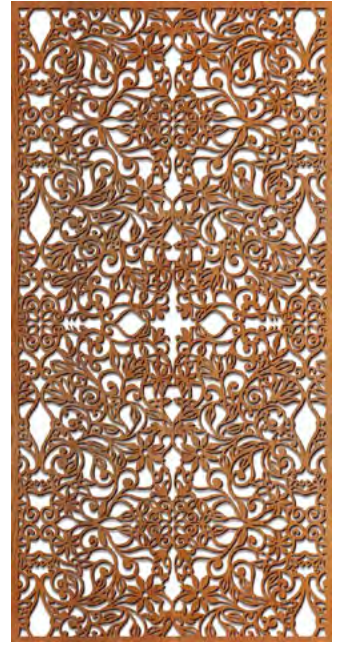
Sea Fan



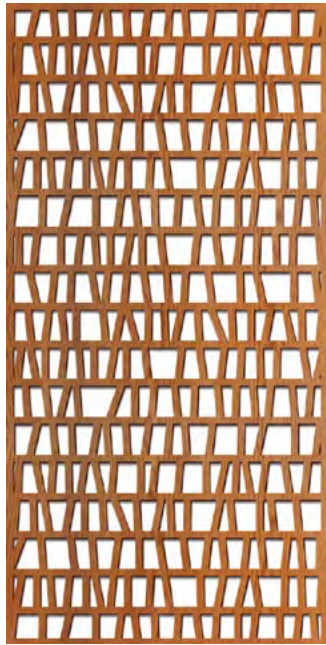
Simply Leaves



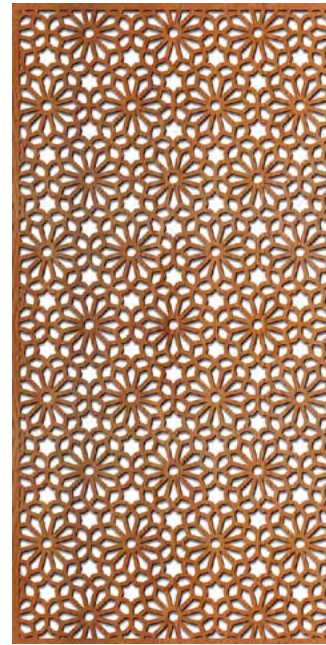
Spain



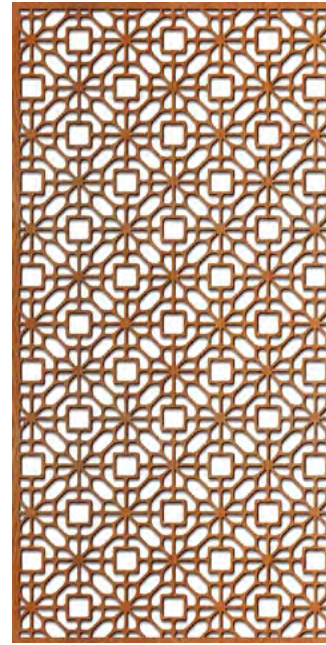
Spring Vines



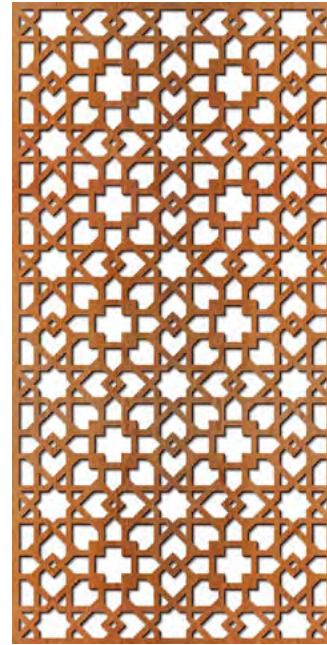
Secret Code



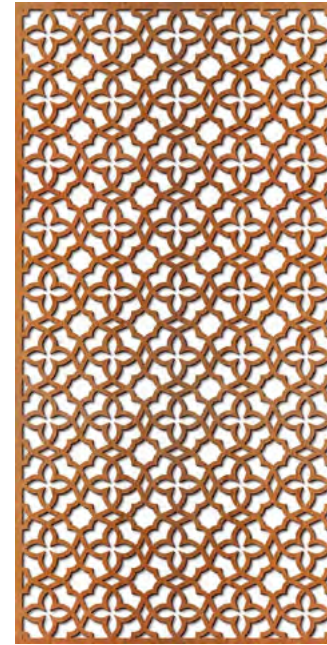
Seville



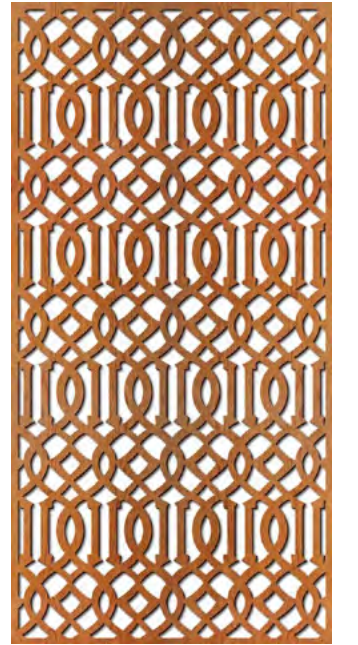
Silver Flower



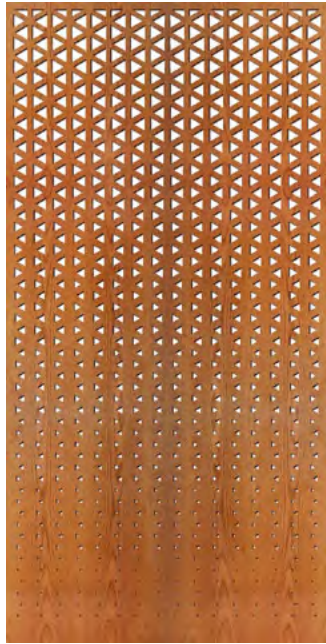
Talavera



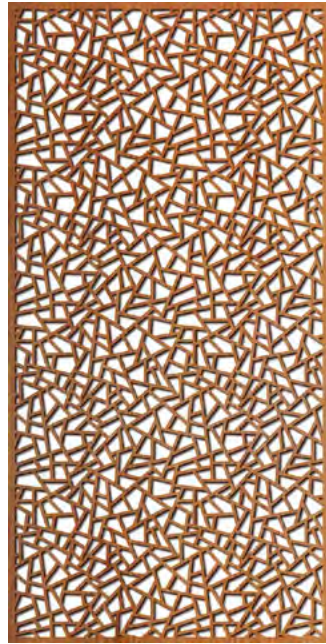
Tangier



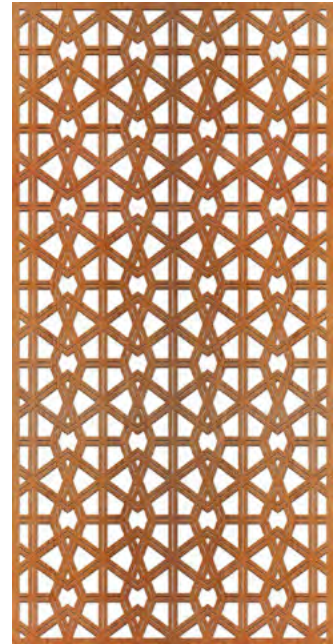
Trellis



Triangle Fade



Triangle Mosaic



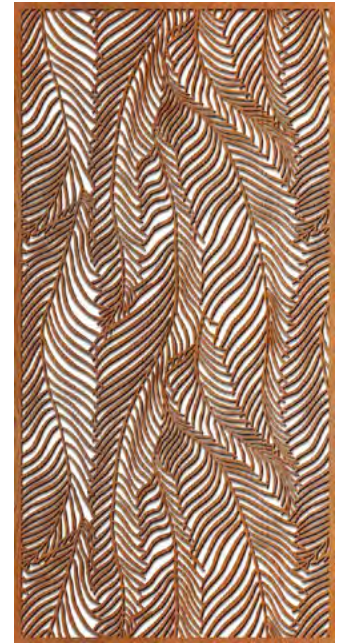
Tripoli



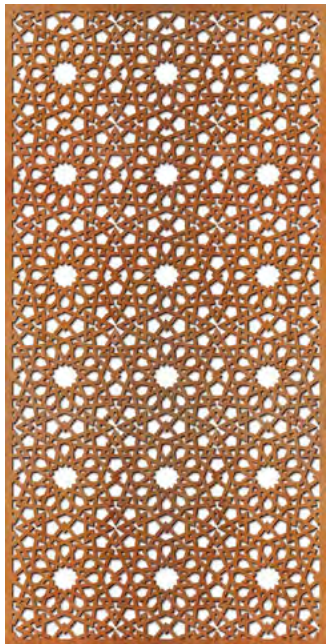
Wavy Leaves



William Morris Tapestry



Wispy Palms



Tunis



Waterfall



Waves



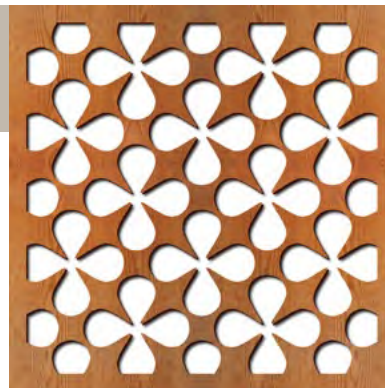
LIBRARY OF PATTERNS

Showing 23" x 23" PANEL SIZE

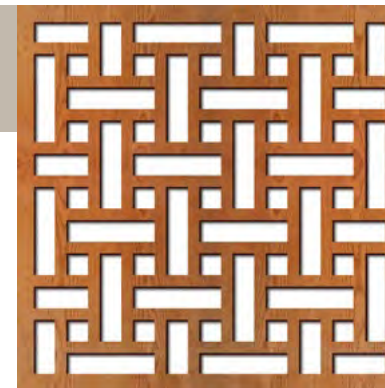
A selection of patterns at Standard Scale

The following renderings represent 23" x 23" examples of patterns at **Standard Scale**. We offer 8" x 8" samples of all

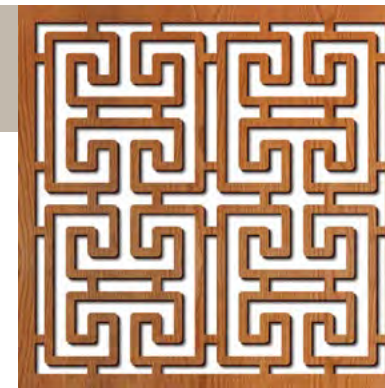
patterns. Most 8" samples have a 50% reduced scale (as opposed to the 100% scale shown here). To request a sample visit: www.lightwavelaser.com/contact. To see complete Library of 208 Patterns visit: www.lightwavelaser.com/library-of-patterns



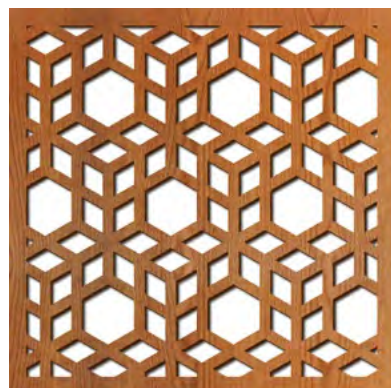
Atomic



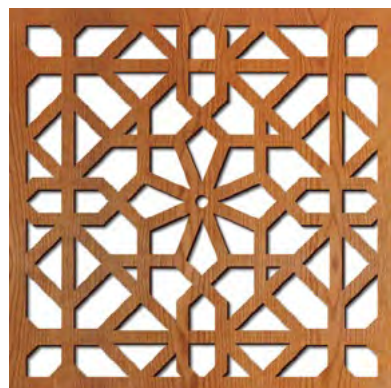
Basketweave



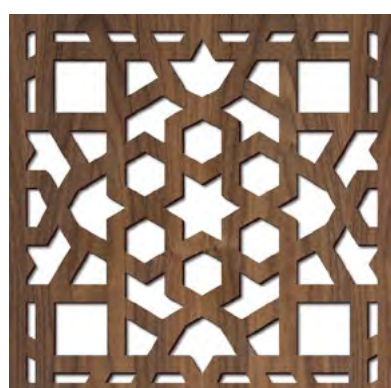
Beijing Grille



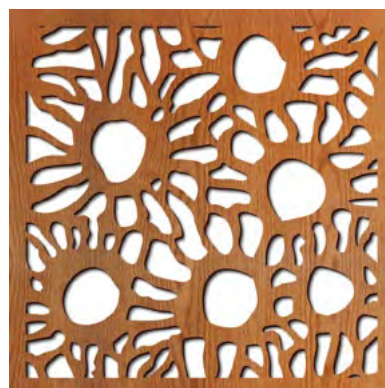
3D Cubes



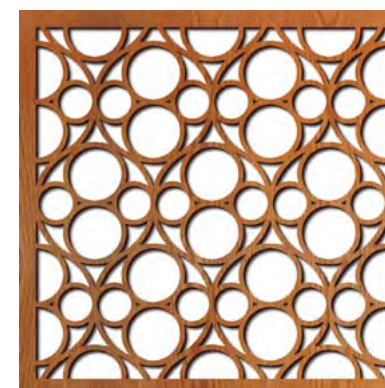
Amsterdam



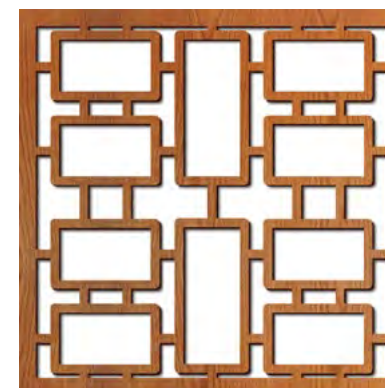
Ancient Geometric



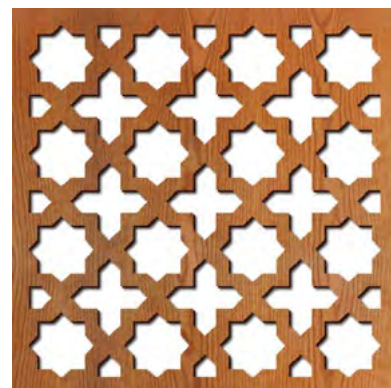
Black Eyed Susan



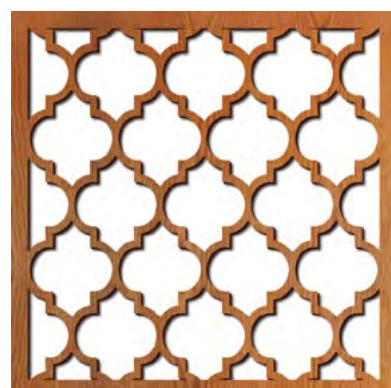
Burbank



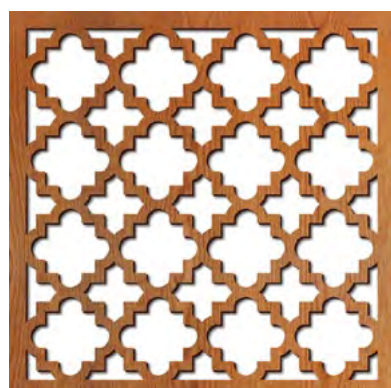
Cambium



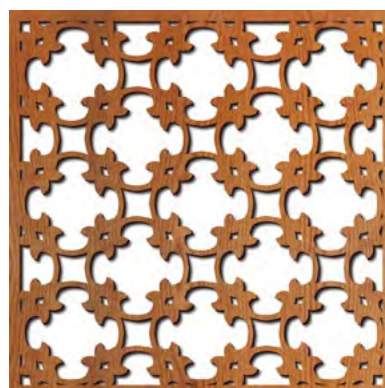
Arabesque



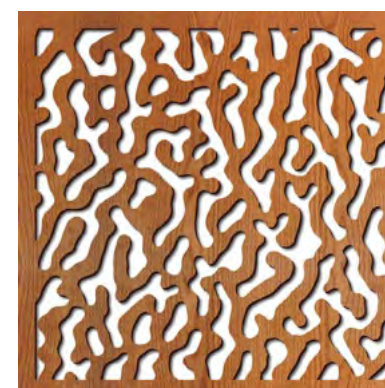
Arabesque 2



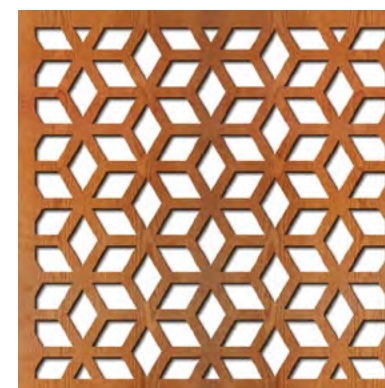
Arabesque 3



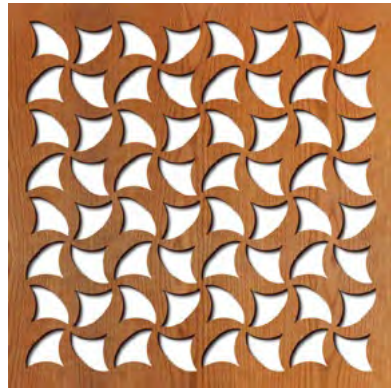
Camphor



Cantaloupe



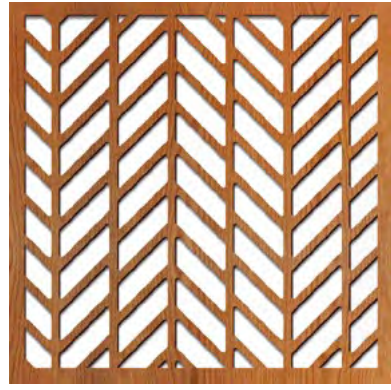
Casablanca



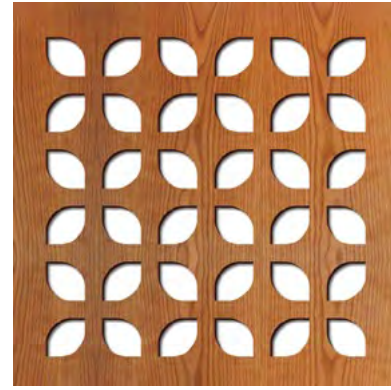
Chester



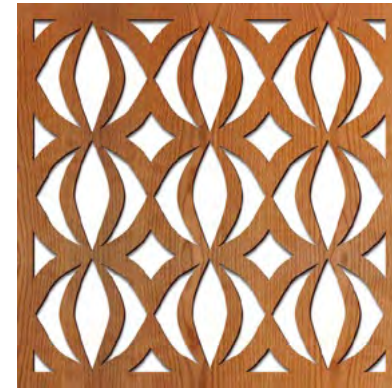
Circle Fusion



Chevron



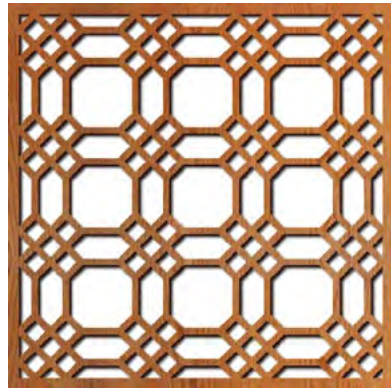
Copenhagen



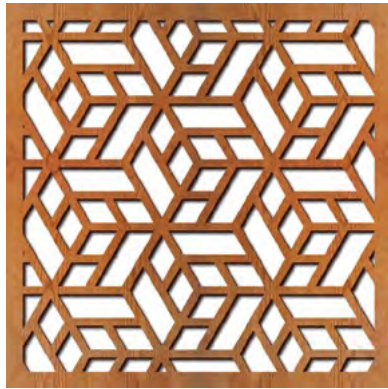
Corcovado



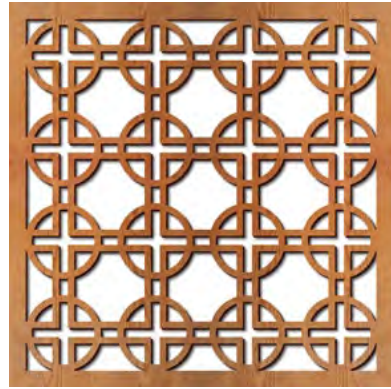
Crocus Spirals



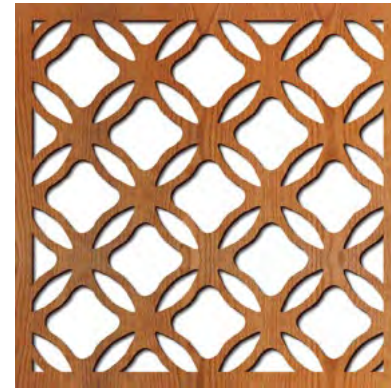
Chicago Grille



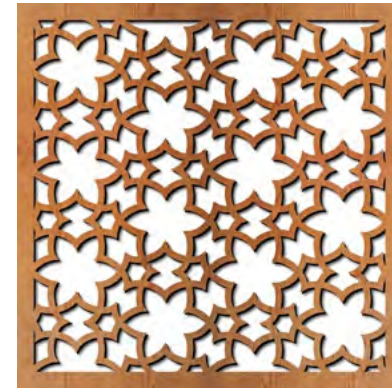
Chinoise Cube



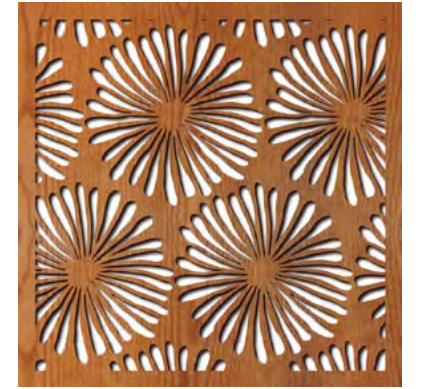
Circle Square



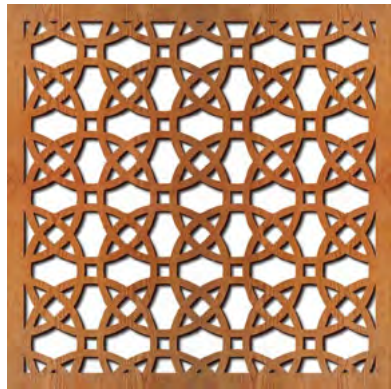
Cube Vibrations



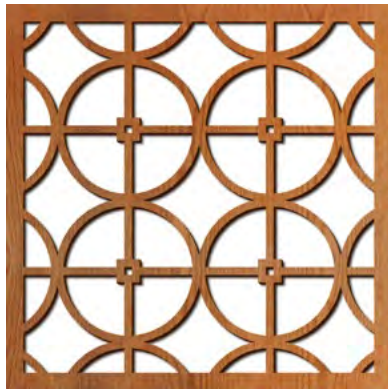
Curvy Stars



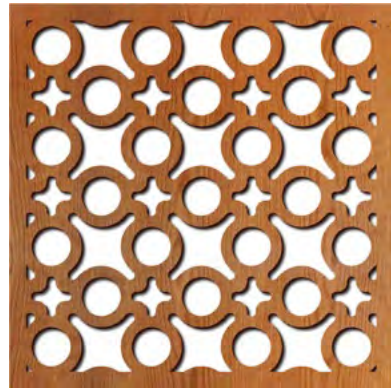
Daisies



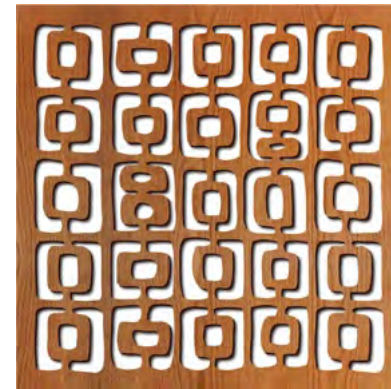
Circles 1 Thick



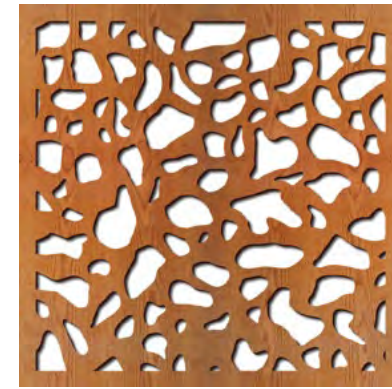
Circles Grille



Concrete Block



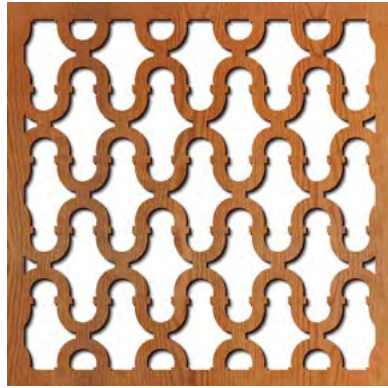
Dallago



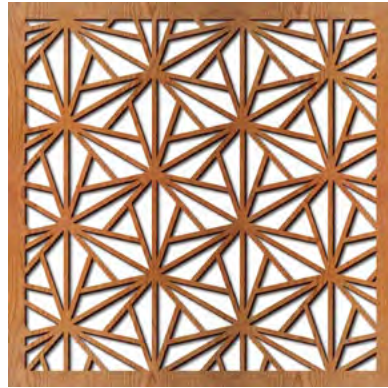
Dappled Light Uniform



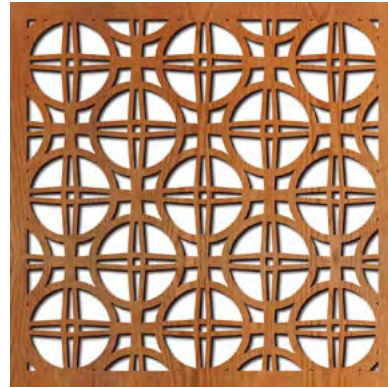
Deco Swirls



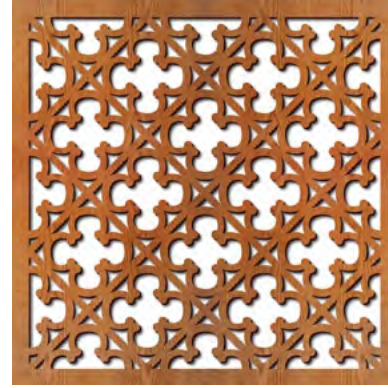
Double Horseshoe



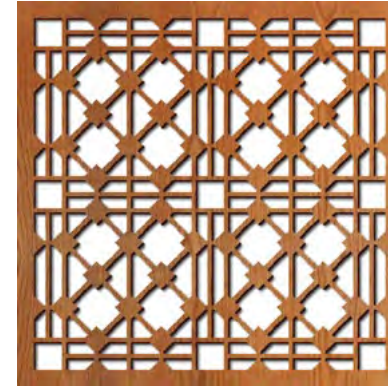
Dragon Claw



El Paso



Gothic Grille



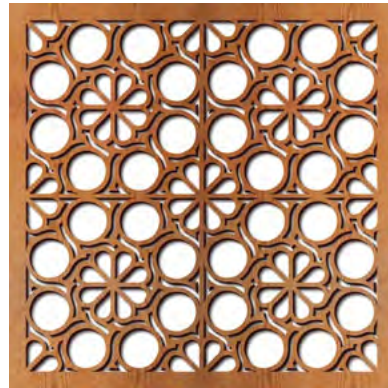
Hardt Grill



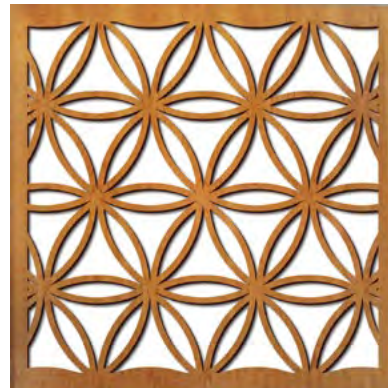
Hawaiian Pattern



Escher



Flower Circles



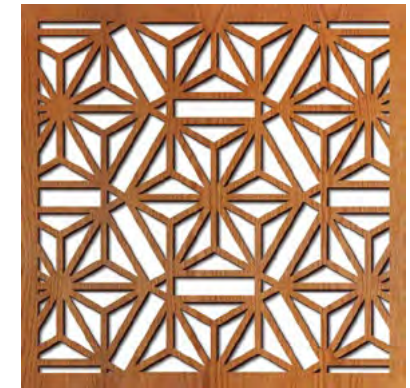
Flower of Life



Heavenly Bamboo



Hexagon Puzzle



Hex Flower



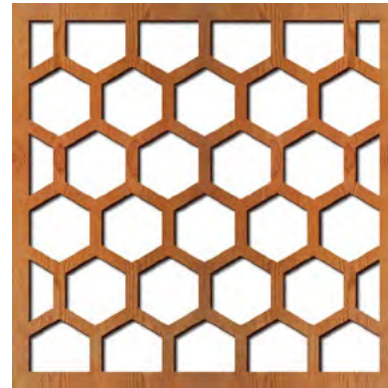
G. Biloba



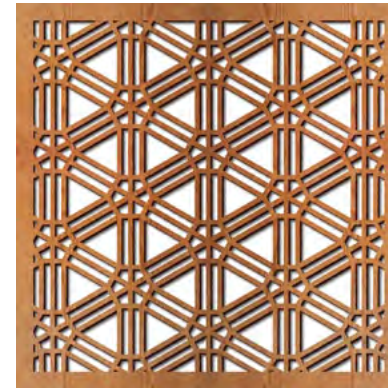
Ginkgo Leaves



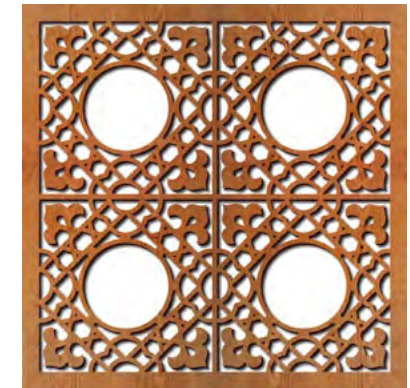
Ginza



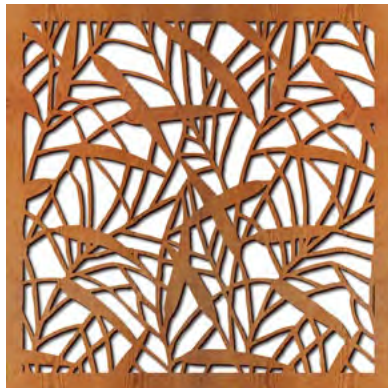
Honeycomb



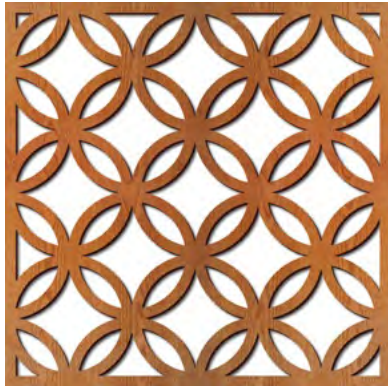
Interlocking Wheels



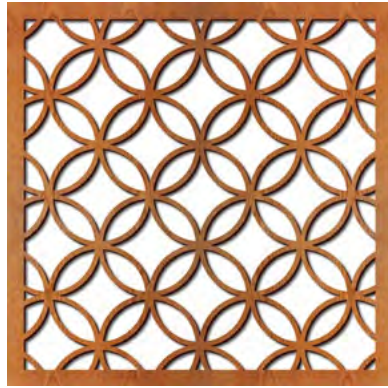
Islamic Square



Japanese Bamboo



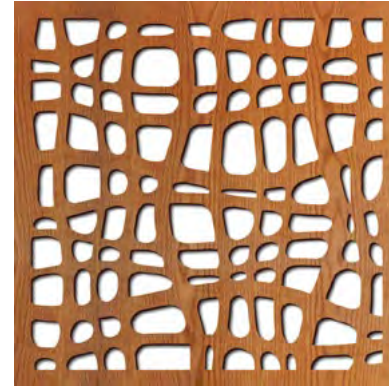
Japanese Circles Thick



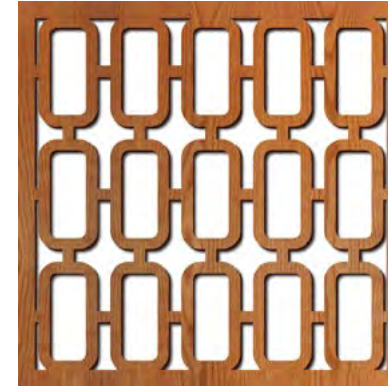
Japanese Circles Thin



Maple Leaves



Mesh



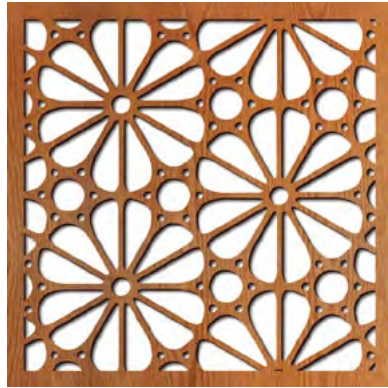
Mezzo Grille



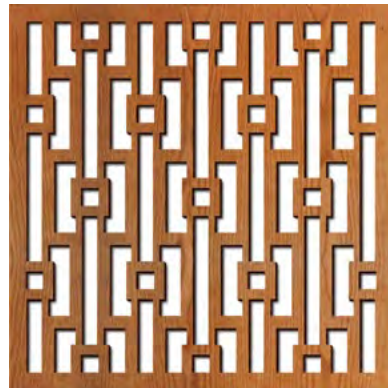
Japanese Fans



Kaleidoscope



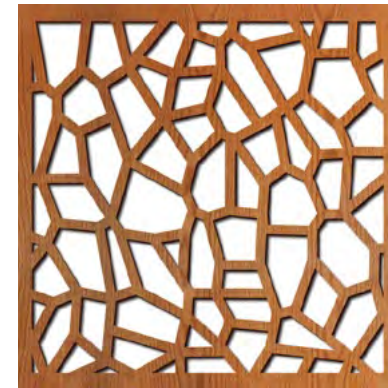
Kyoto



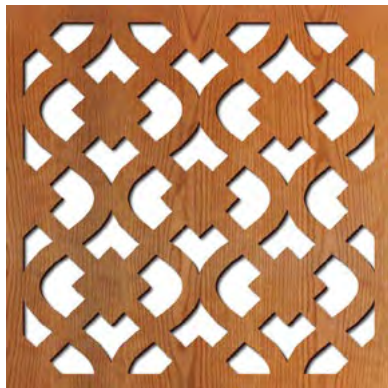
Mod Geometric



Moorish Leaves



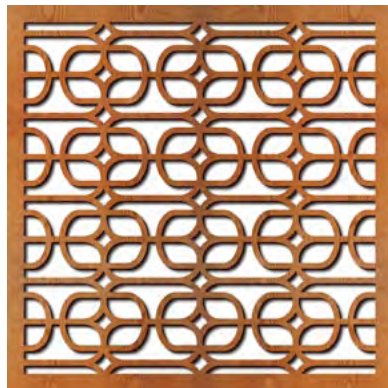
Mosaic



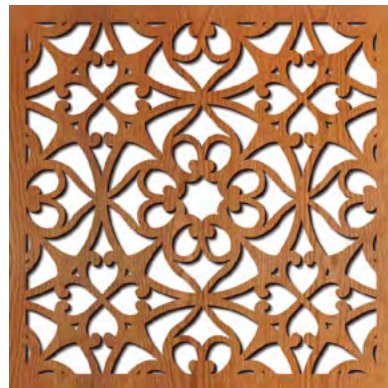
Leeds Grille



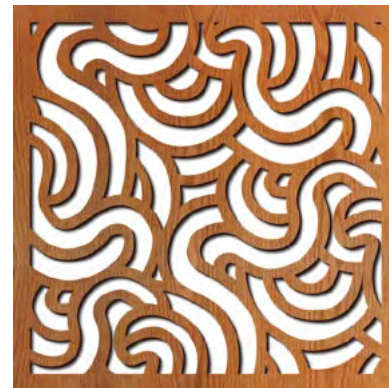
Lilium



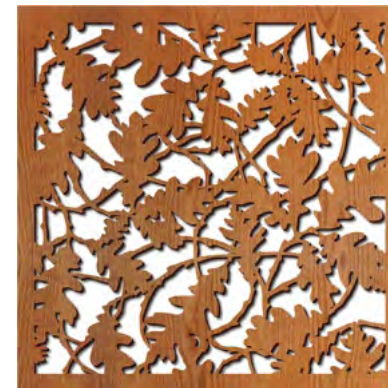
Lounge Grille



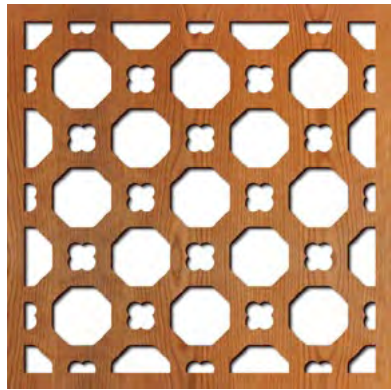
New Orleans



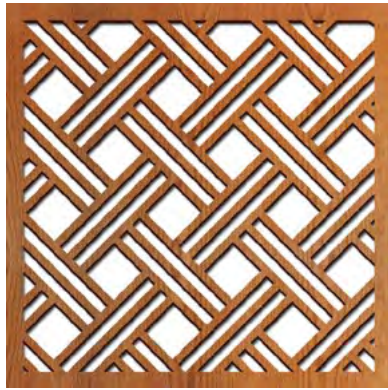
Noodles



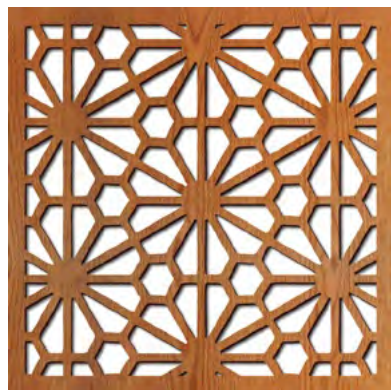
Oak Leaves



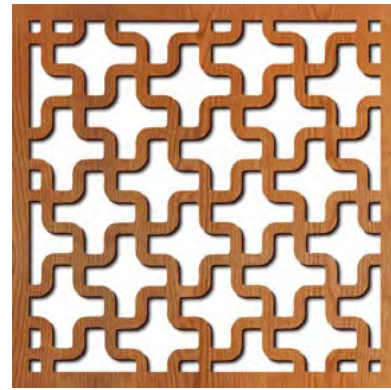
Octagon Mosaic



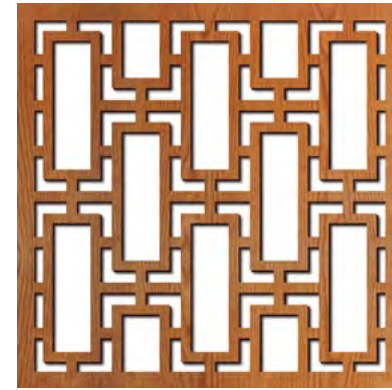
Open Basketweave



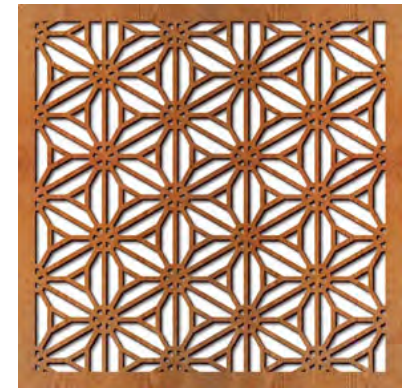
Osaka



Puzzle



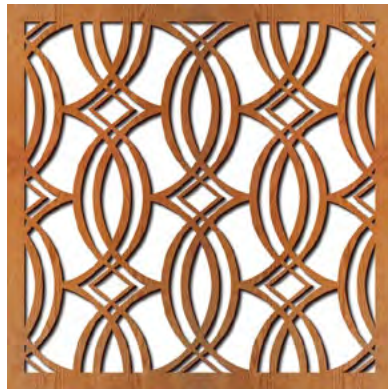
Rectangular Lattice



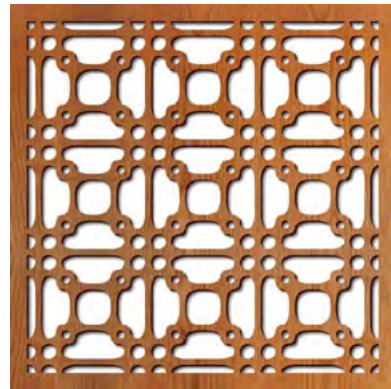
Reverse Flower



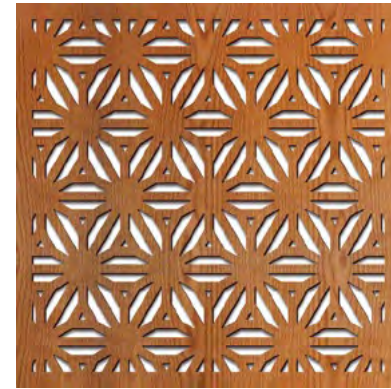
Palace Fruit



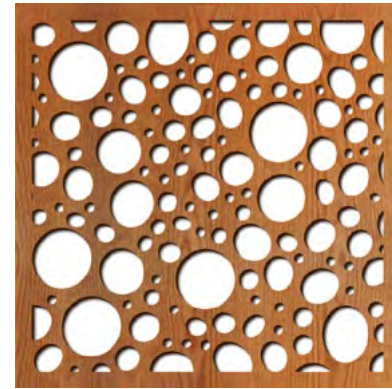
Paris



Perry Grill



Reverse Flower Thick



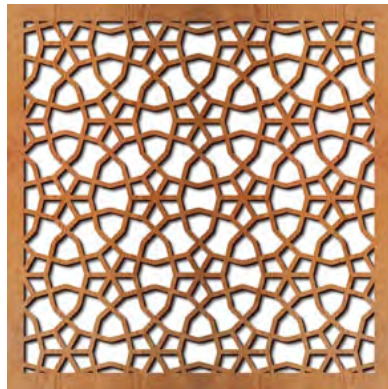
River Rocks



Roses



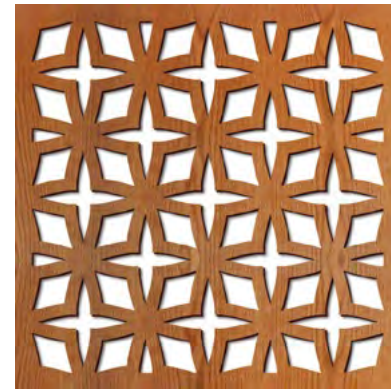
Persian Circles



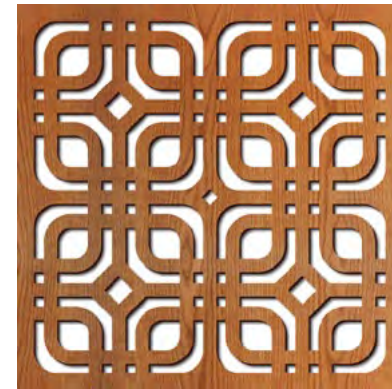
Persian Wheels



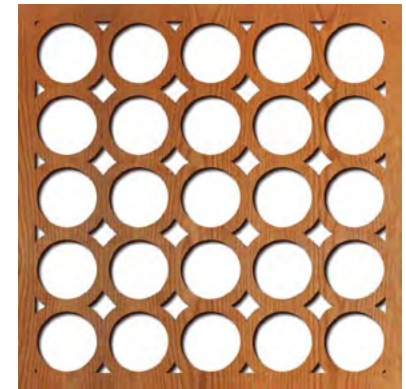
Pinwheels



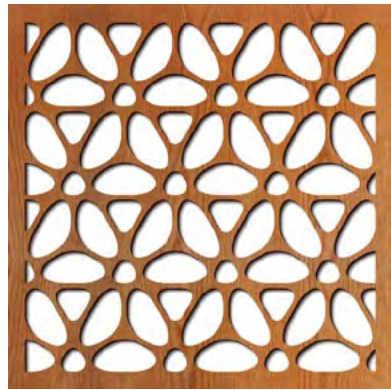
Rota Star



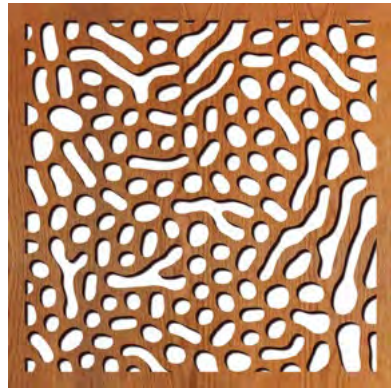
Rounded Squares



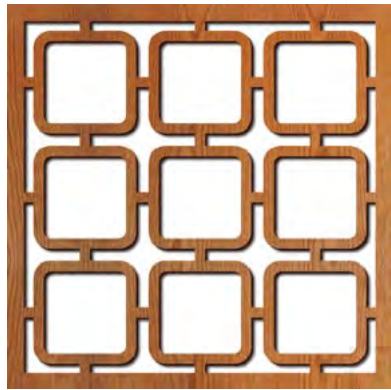
Santa Monica



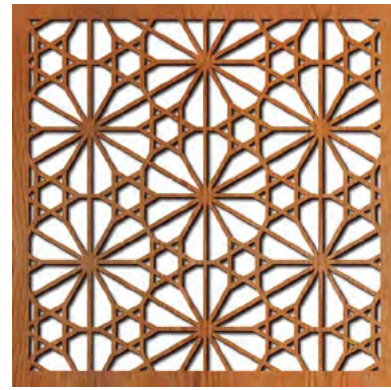
Sao Paulo



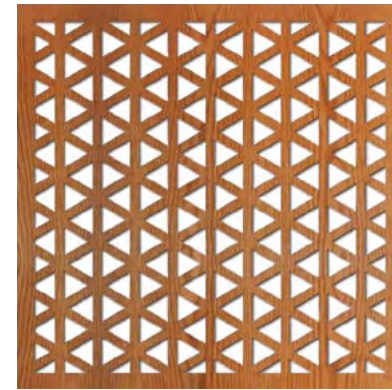
Shapeshift



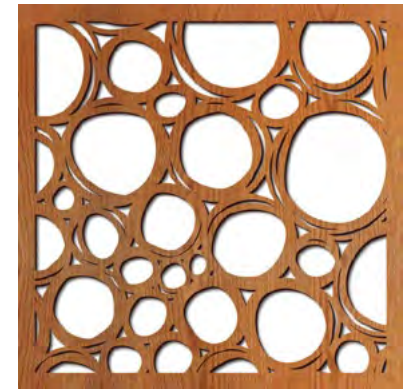
Square Mezzo



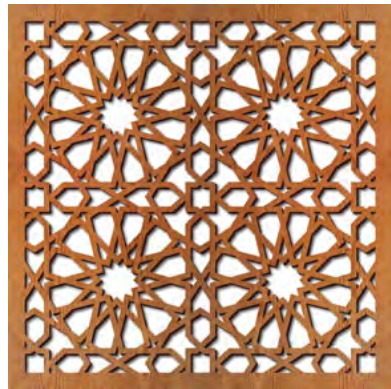
Tortoise Shell 2



Triangle Uniform



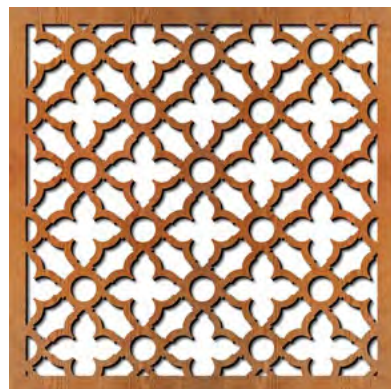
Truckee



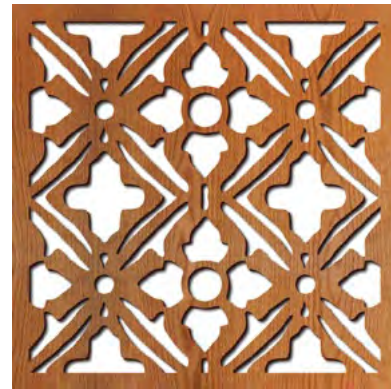
Star Pattern



Sunrise



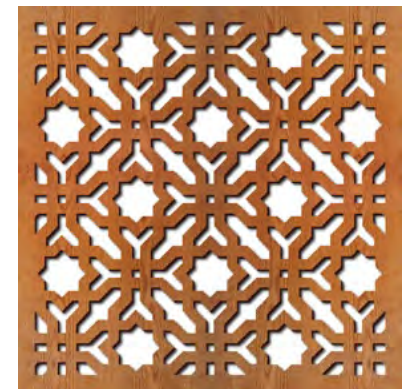
Swift Grille



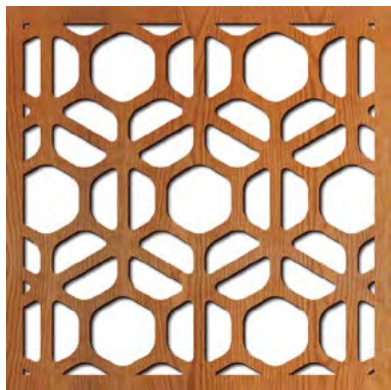
Tuscan



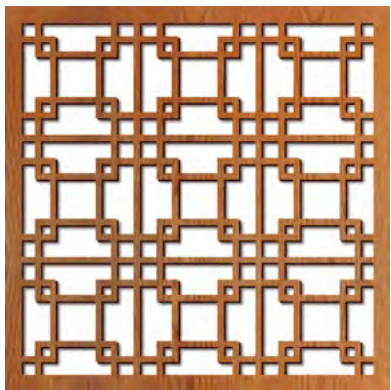
Try Angles



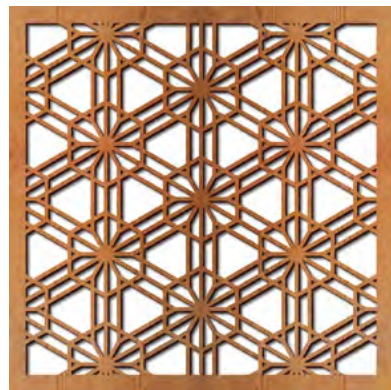
Wiseman Star



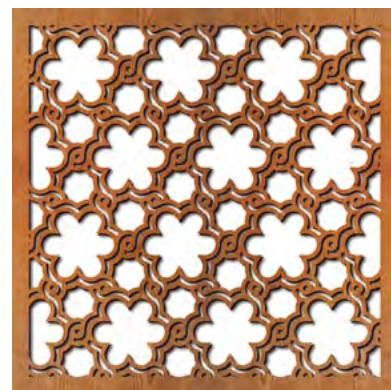
Taiwan



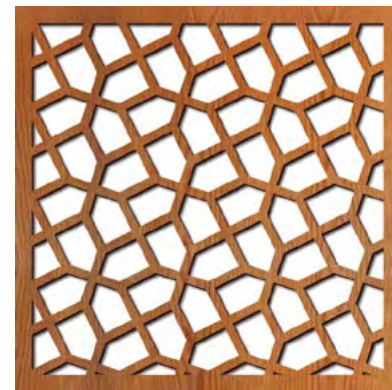
Tokyo Grille



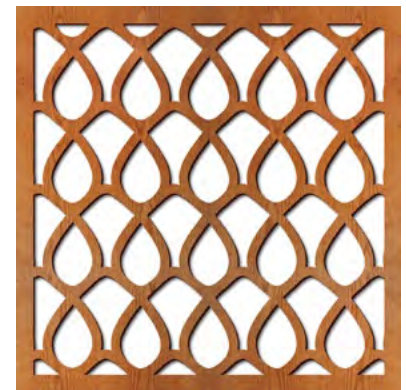
Tortoise Shell 1



Woven Flowers



Woven Links



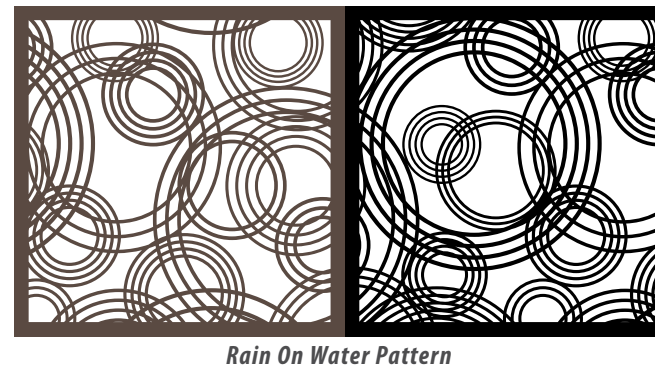
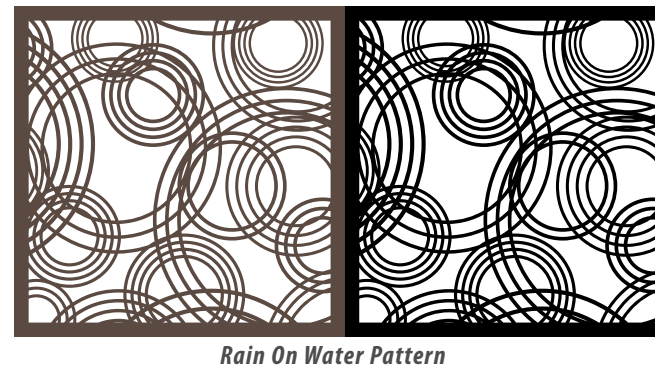
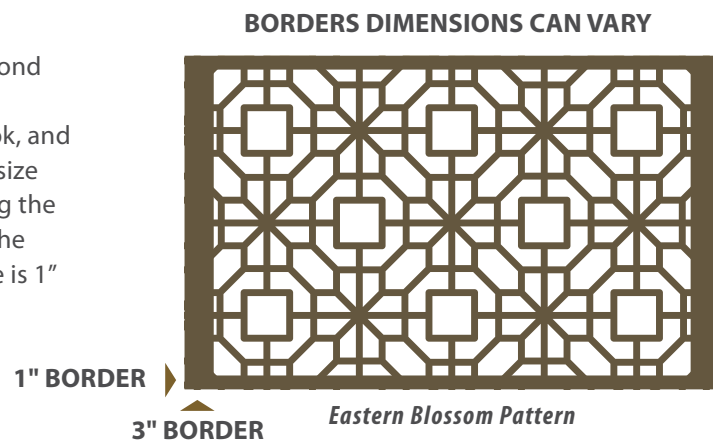
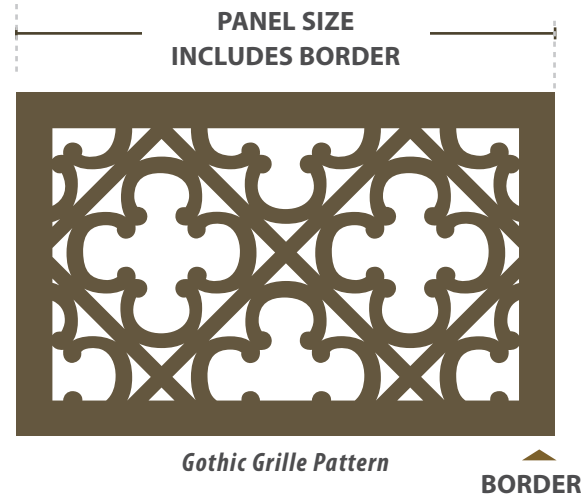
Woven Wire

PATTERN OPTIONS

You have a vision for your panels, and there are practical aspects to consider such as how they'll be installed, will the edges be covered or exposed, is the thickness appropriate for the application, should the scale of the pattern be increased or decreased? Our project managers can help you decide what will work best. Borders can be customized, holes can be pre-cut, and several other customizations can be accommodated. This section gives a few examples of the most common border options and panel adjustments.

WHAT IS A BORDER?

A border is the uncut area that extends beyond the artwork. Borders are important for the stability of the panel, creating a finished look, and helpful for installation of the panels. Panel size refers to the total size of the panel, including the border, while art area refers to the area on the panels that is laser cut. Standard border size is 1" but can vary according to your needs.



NO BORDER WHERE PANELS MEET, PATTERN DICTATES WHERE PANELS ARE CUT

Pattern flows continuously across panels without a border where the panels meet. In this case, the division of panels needs to be contoured around the pattern or there will be pieces that fall out: this also potentially changes the panel sizes.

PATTERN REPEATED

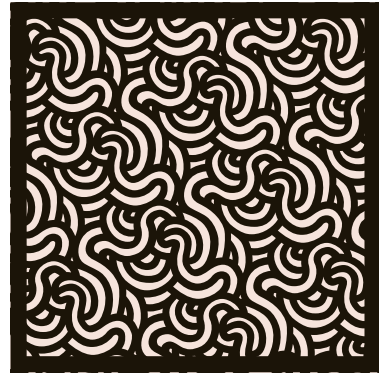
Second panel is a repeat of the first. This is a cost-effective solution, however, the pattern can look awkward where the panels meet. The panel continuous option looks much more aesthetically pleasing.

PATTERN CONTINUOUS

Second panel is continuous, where the pattern flows across from the first panel naturally. This option looks much more pleasing to the eye.

PATTERN SCALE

Scaling patterns down past a 10% reduction incurs additional fees to offset extra laser-cutting time. There is no additional cost to increase the pattern scale.



Noodles Pattern
50% Reduced Scale



Noodles Pattern
Full Scale



Noodles Pattern
50% Increased Scale

CUSTOM PATTERN & SHAPES

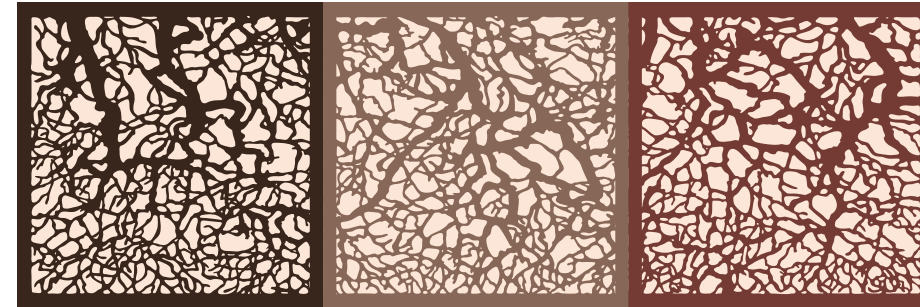


Our designers are able to modify art provided by you, create art for you from scratch, or modify our patterns to fit your needs. Panels can be formatted in an any custom shape.

If you are providing a custom pattern you must own the artwork or have bought the rights to use it in a laser-cut application. But we can use *any* image as inspiration to generate original artwork just for you. Custom shapes and patterns require art time and additional costs, which can be discussed in further detail with your project manager.

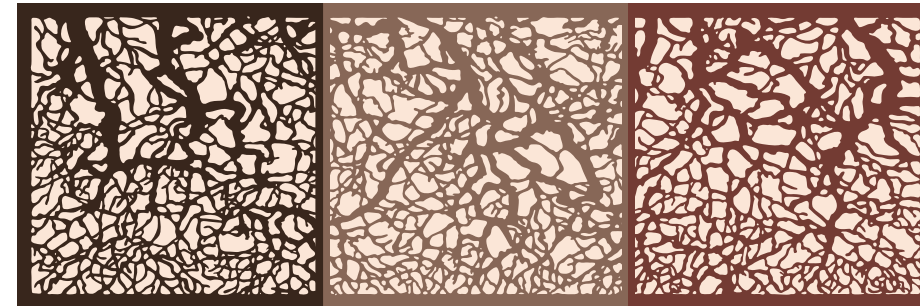


BORDER OPTIONS - PATTERN SET UP AS CONTINUOUS ACROSS THREE PANELS



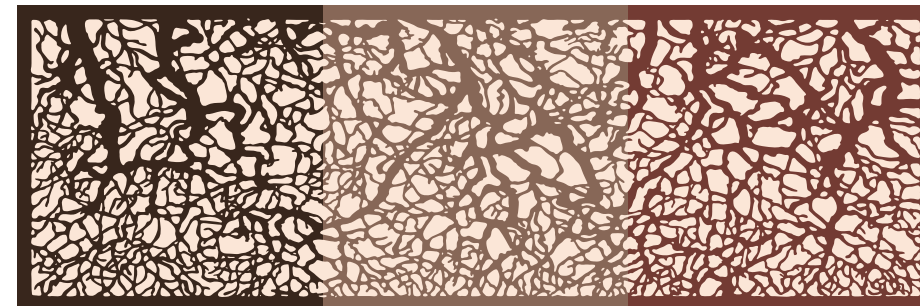
BORDER UNIFORM

Border is the same size on all panel edges, including where the panels meet.



BORDER 1/2 SIZE WHERE PANELS MEET

Border is adjusted to half size where panels meet, making the interior border appear the same as the border around all of the outside edges.



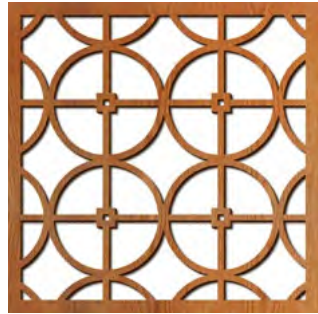
NO BORDER WHERE PANELS MEET

Pattern flows continuously across panels without a border where the panels meet.

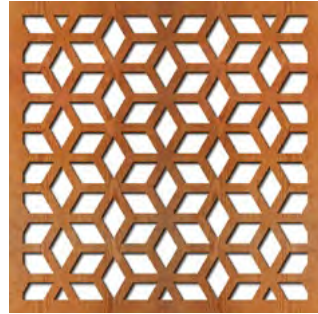
Branches Pattern

PERCENT OPEN

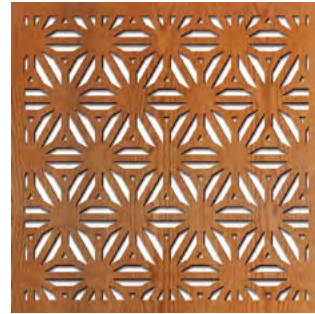
Our patterns vary greatly as far as their percent of open space. This can affect the amount of light let through as well as level of privacy.



Circles Grille
69% open



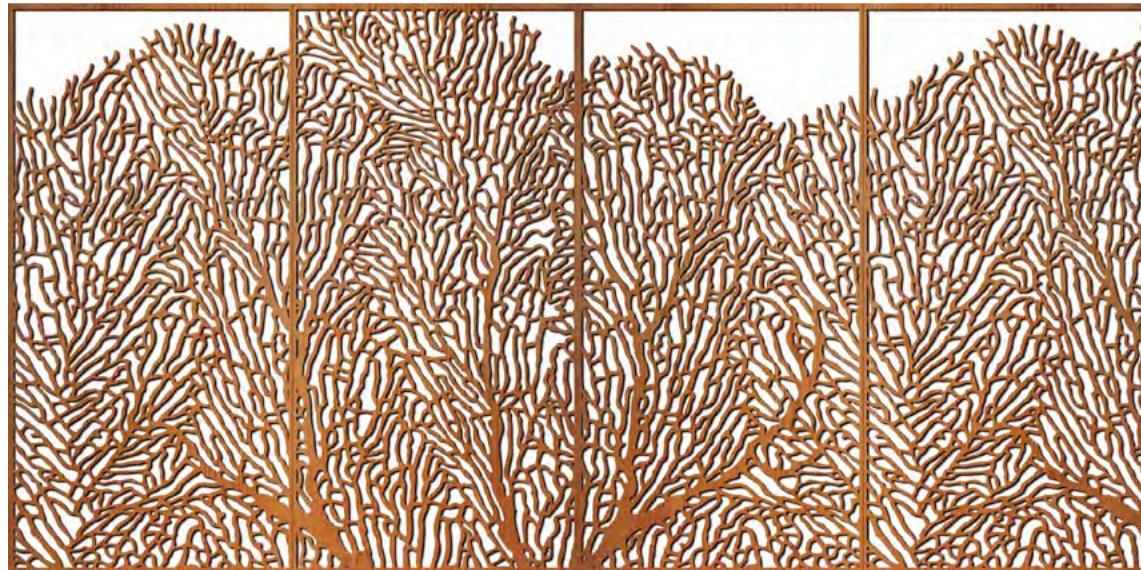
Casablanca
49% open



Reverse Flower Thick
31% open

PATTERN CONTINUOUS ACROSS MULTIPLE PANELS

This example shows Sea Fan pattern continuous with borders.



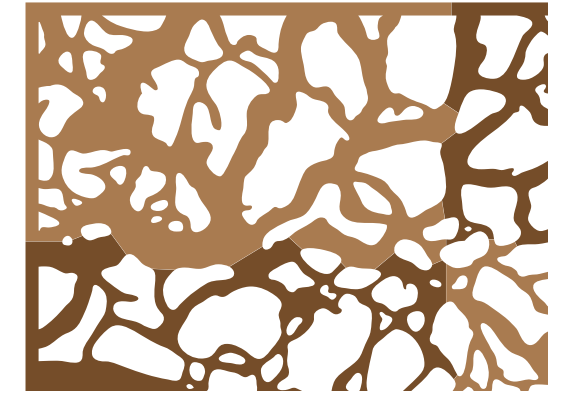
Sea Fan Pattern

IRREGULAR EDGE PANELS

Panels can be divided irregularly rather than with straight edges, resulting in a more natural-looking join. In this ceiling application illustration the panels are shown in different colors.



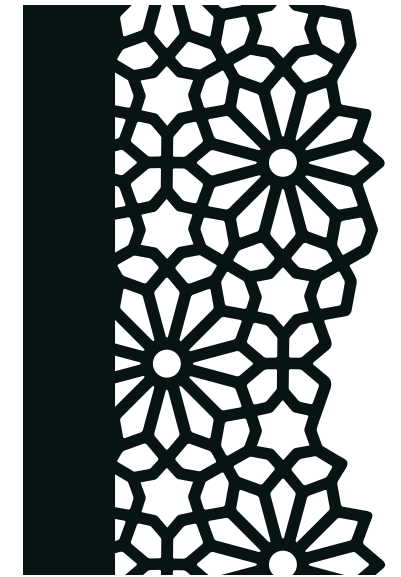
Panels separated



Panels together

NO BORDER PANELS

Some of our patterns are suited to have the art presented without a border.



INSTALLATION OPTIONS



ISEC / Wincome USA, Westin Hotel, Anaheim, CA; 3/4" White Oak, Custom Finish, Branches Pattern

How We Can Help With Your Installation

We have recently expanded our offering of hardware for mounting panels on walls and ceilings. In addition, we can provide shop drawings showing installation options. There are a variety of ways to install our products, and ultimately the contractor or other person doing the installation needs to determine what is appropriate for the site. While we can't do installations, we can offer options, and frequently provide the hardware for the selected option.

For example, we now inventory standoffs in common sizes, and can provide the hardware to mount into a variety of materials such as sheet rock or concrete, interior or exterior. For ceilings, we have several different mounting options, depending on the drop height, panel size, and local code requirements. For all installations, we can talk with your contractor, architect, or engineer to answer questions to help them determine an installation method.

The following pages contain some information on hanging ceiling panels, wall panels and light box installation. We carry each of the hardware pieces shown.

In addition to the information here, you can contact us with any questions you have. Over the years, we've worked on thousands of projects and can share information on how other people have installed our products.



Russell Video, Ann Arbor, MI; 1/4" MDF, painted, Barcelona Pattern

CEILING

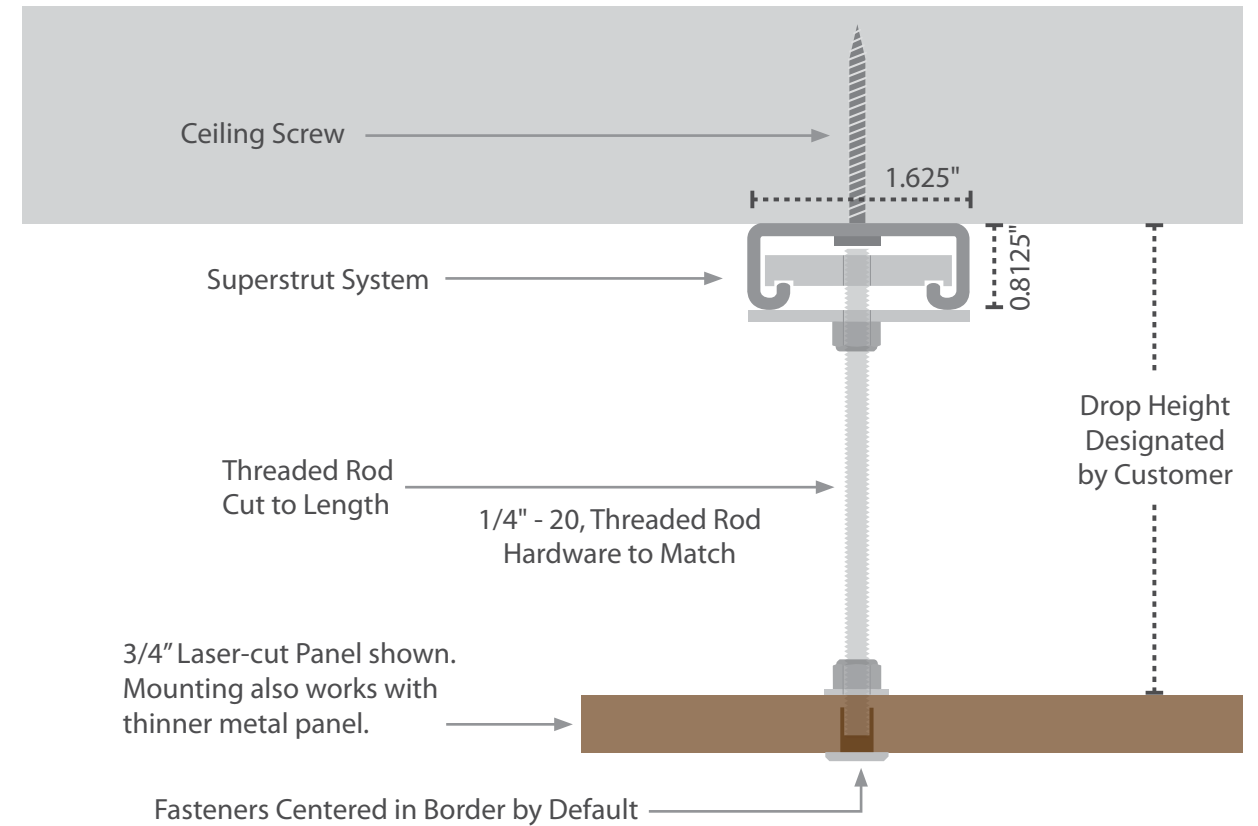
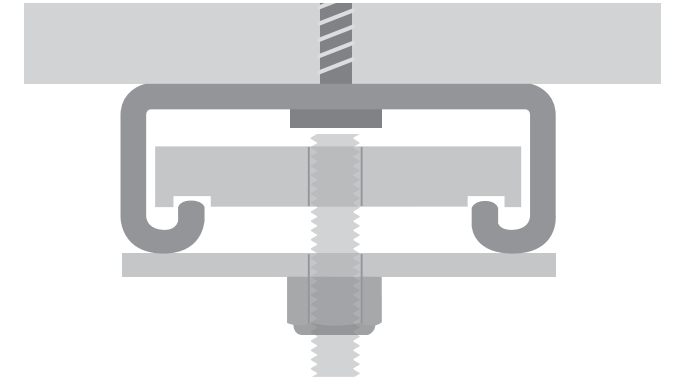


94 Brockamp & Jaeger Inc., Hotel Rose, Bottle & Kitchen, Portland, OR; 1/2" Walnut, clear finish, Custom Pattern

SUPERSTRUT CHANNEL SYSTEM

Superstrut channel systems are extremely strong. They are a good option for ceiling mounting 1/2" and 3/4" panels. The superstrut channel has holes that are 2" apart and are bolted to the ceiling in as many places as necessary. The length of the threaded rod sets the distance between the panel and the superstrut/ceiling. If the drop height – space between the panel and the ceiling – needs to be greater than 6", all-thread can be used for any distance beyond that.

SUPERSTRUT CLOSE UP



WALL MOUNT OPTIONS



KEYHOLE SLOTS

For a flush mount to the wall without visible fasteners, a keyhole slot is an easy to install and cost-effective solution. One or two keyhole slots can be routed in the top border of a panel.



VHB DOUBLE-STICK TAPE

VHB (Very High Bond) is great for mounting 1/4" thick panels and adheres very well to almost any surface. Works on textured walls but is for indoor use only.



MAGNETS

We recommend using magnets on 1/2" panels or thinner. The number of magnets needed depends on weight and size of panel. Magnets hold approximately 5 lbs each and may be used on a wall or the panel when attaching to a steel frame.

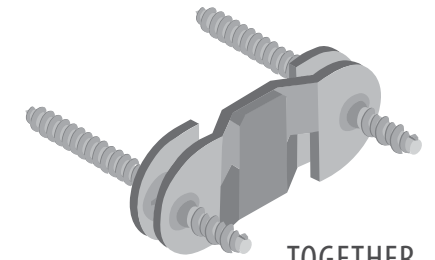


PSA LINER

PSA (Pressure Sensitive Adhesive) is typically used for overlaying a laser cut panel on a solid backing panel to create a layered effect. We can provide a PSA liner which is adhered to the panel before it's cut.



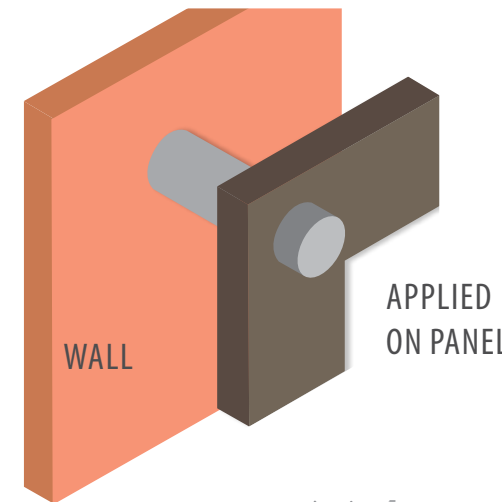
INDIVIDUAL PIECES



TOGETHER

INTERLOCKING BRACKETS

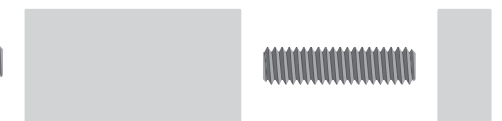
Z Brackets installed at the top of your panels provide an extremely strong and stable installation of your panels. This method is ideal for larger panels or heavier panels.



APPLIED ON PANEL



TOGETHER



EXPLODED

BOLTS / STANDOFFS

Bolts or standoffs can be used for any size panel, in any thickness or weight. With this method, the spacing between the wall and panel can vary, which allows the panel to be back lit or spot lit if desired. Using this approach creates a more sculptural look.

LIGHT BOX ASSEMBLY

Light boxes can be a beautifully-lit piece of art or signage. A 4-inch deep light box is our standard light box depth, however, we can make them as shallow as 2.5 inches or as deep as 8 inches. LED lights are distributed evenly across the backing box to generate a uniform light. This is assisted by a light-diffusing acrylic that mounts to the back of the laser-cut panel.

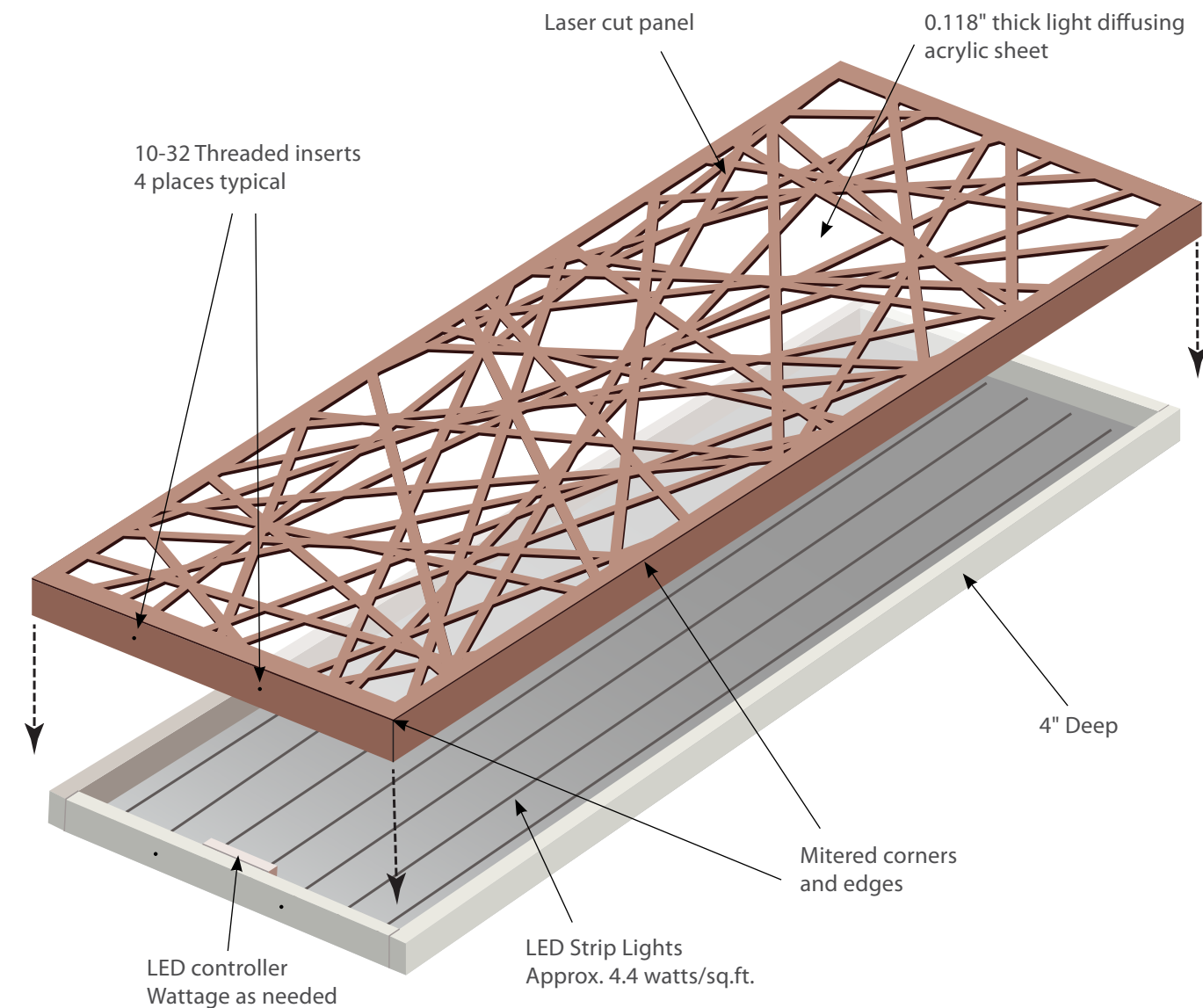
We are now using extremely high efficiency lights — 170 lumens per watt.

Warm white (3000K) is our standard lighting; a dimmer switch that's compatible with our silent transformers is available for hardwired light boxes. We also offer color-changing light boxes that can be set to any color in the RGB spectrum. One remote can control multiple colored light boxes for your convenience and ease of use.

- Standard 4" deep box fits over backing box mounted to desired wall surface; secures to backing box with countersunk flathead hardware through sides of box.
- 4.4 Watts per square foot of light box on average.
- The provided transformer works with standard power in the United States, Europe or Asia. 120V to 300V input, 50 or 60 Hz. The lights are 24 VDC and can be dimmed with a standard 0-10V dimmer which we can provide.
- Boxes are available with a plug at 3, 6 and 9 feet or to be hardwired by licensed electrician.

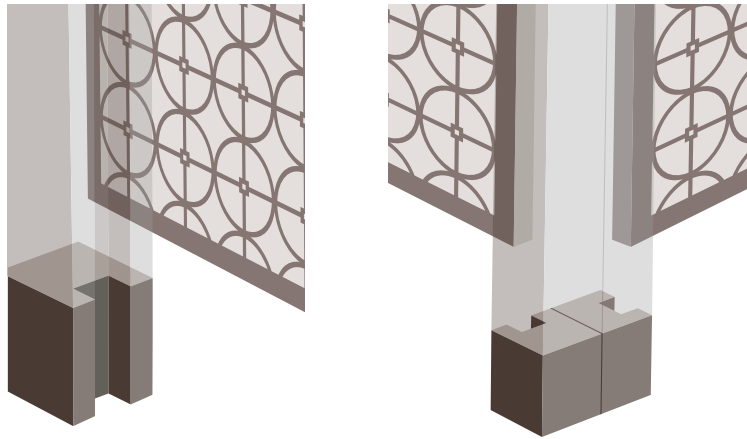


- Rows of LED strip lights are attached to backing board, spaced to provide uniform light.
- Backing box is made of Plywood.
- Transformers are sized to specific application, and are mounted inside box by default. The option for electrician to install elsewhere is available.
- Dimmer switch is available for standard light boxes. Colored light boxes are controlled via remote.

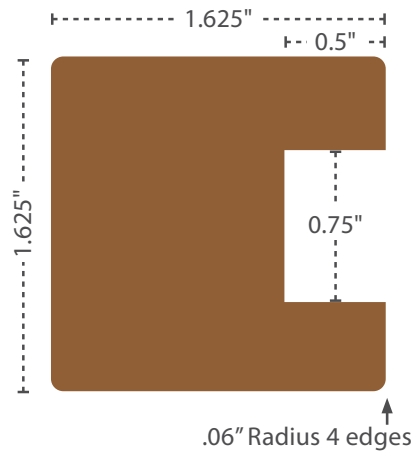
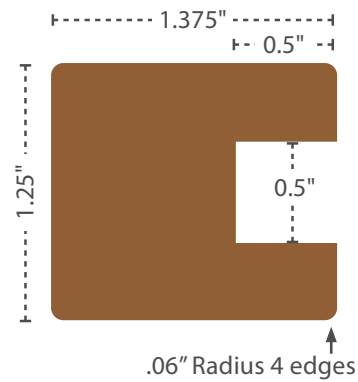
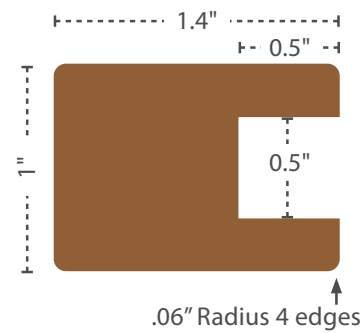


CHANNEL MOLDING

We offer a hardwood channel molding that can be used with 1/2" and 3/4" wood panels. It can be used on a single laser-cut panel, or a grouping of two or more. The molding comes standard in maple or walnut. Special order materials may be available at an additional cost, and can be discussed with our in-house project managers..



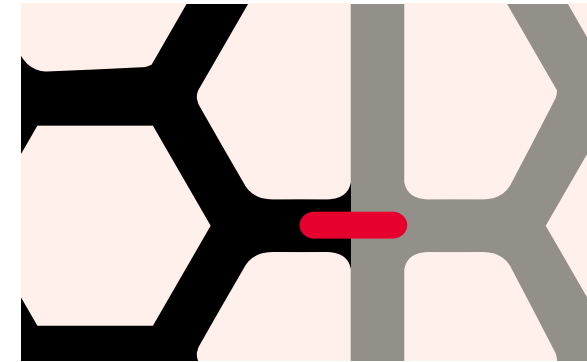
C MOLDING OPTIONS



Close-up of C molding with mitered corner on floor screen

DOWEL PINS

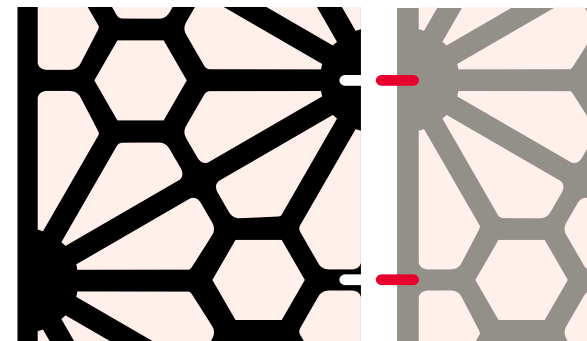
CLOSE-UP OF PIN



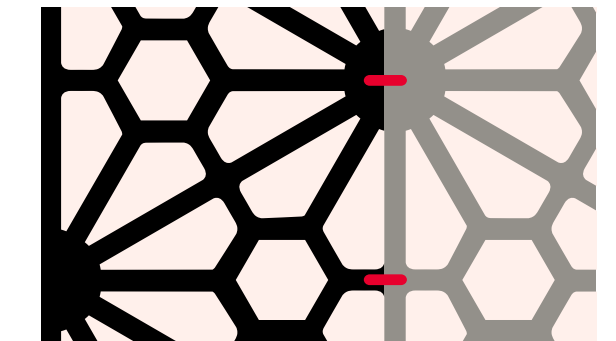
Dowel pins are often used when two or more panels are to be placed next to each other that have continuous artwork without a border. These pins give great stability to the panels. Here are some things to keep into consideration:

- 1/4" in diameter and 1" long
- Pattern fretwork must be at least 1/2" wide and 5/8" on either side of the joint
- Available for thicknesses of 1/2" up to 3/4"
- Panel break needs to be straight

PANELS SEPARATED



SHOWING PIN LOCATION WITH PANELS TOGETHER



ORDER PROCESS



SELECT »

- Application
- Material & Finish
- Pattern

The creative process unfolds as you choose panel details that will work best considering your application. Choosing the pattern, material and finish are all decisions that can be discussed with our supportive sales staff. They are happy to offer advice, make recommendations and send out samples.



QUOTE »

- Phone call or online
- Discuss pricing
- Finalize sizing

Our excellent customer service staff supports you as your quote is prepared. We discuss your needs specifically and make suggestions considering aesthetics, safety and environment, affordability and durability. Discussions include set-up fees, border size, pattern scale, material type, and thickness.



CONFIRM »

- Confirm order
- Pay Deposit

Once details are finalized and your project is ready to order, a 50% deposit is required. When the deposit is received, your order is confirmed and your lead time commences. Your order is put in the production queue, and our art department creates a proof. We re-confirm measurements and you sign off on the project.



PROOF »

- Receive Proof
- Revise if needed
- Approve Proof

A proof illustrating your panels with the pattern is created, displaying relevant details of dimensions, border size, material choice, thickness and finish. Revisions are made if needed. Prompt customer approval is essential to keep the project to the targeted date.



PRODUCTION »

- Manufacture
- Inspection
- Crate

Your panels are cut and finished to your specifications. All panels are inspected. Your project is packaged in a custom rigid plywood crate and sandwiched in layers of foam. Our shipping process is streamlined to provide you with a reliable and cost effective shipping experience.



DELIVERY

- Ship
- Delivery
- Inspection & Signature

You are notified when your project ships and provided with tracking info. Our sales team assists you as needed, and collects final payment. Upon delivery, please inspect it for damage before giving your signature. Our customer support team is always here to help.

ORDER INFORMATION



PRICING

Prices vary according to the type of material, finish selection, thickness and quantity. Oversize or custom wood will have premium pricing. Discounts may apply for larger projects; Please inquire.



CUSTOM ART

Though we have an expansive library of patterns to choose from, we also specialize in being able to create a laser-ready pattern or artwork from your inspiration. If you are providing us with a digital file, we prefer vector art files rather than raster. Preferred formats are .ai, .pdf, .eps, .dxf, .dwg. We look forward to collaborating on your custom project.



LEAD TIME

Lead time is determined by art, materials, and any custom work your project requires. Projects requiring custom art or custom finishing or any other custom work will have a longer lead time, while stock art and materials will have a shorter lead time. Please contact us if your project is large in quantity or if there are scheduling considerations.



SHIPPING

We ship using common carrier and use a streamlined process to provide you with the best price, as well as a dependable and prompt delivery. We send tracking information to you as soon as it is available. We ask that you inspect the crate for any damage before accepting the shipment.



RUSH

We can accommodate projects that need a RUSH. Fees start at \$350 or 10% of the project.



LIGHTWAVE

LASER

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lightwavelaser.com