

the style and feel of indoor

the line at the Lloyd Flanders factory.

Wicker & Woven



furnishings with the durability to withstand outdoor use.

DAWN OF A NEW ERA

On the heels of the second industrial revolution, Lloyd saw a need to mechanize the time-consuming, labor-intensive process of hand making wicker furniture.

At the time, wicker furniture was crafted by building and shaping the structure, while filling it in with the woven material almost simultaneously. Lloyd developed a way to separate these processes, building the frame and then using paper fiber twisted around a steel wire to give the material strength and pliability, weaving the wicker material through a loom into sheets that could then be attached to the furniture frame. The basic process hasn't changed much in the ensuing years.

"Two-inch strips of cellulose fiber are twisted to create the warp fiber used in our Lloyd Loom. The weft of the loom material is created with the two-inch strips of cellulose fiber twisted around aluminum stakes," said Lou Rosebrock, senior vice president, sales and marketing, Lloyd Flanders. "This gives the Lloyd Loom material greater strength and allows us to staple the woven Lloyd Loom material to our aluminum frames."

The warp fiber is then threaded into the Lloyd Loom from nearly 500 spools, and the weft threads are pushed across and woven through the warp, creating the woven material. As the finished material leaves the loom, it travels through a Durium finish bath, a polyester material that seals the wicker, giving the finished product a smooth hand and protecting it from bacteria and the elements. The finish also allows Lloyd Flanders to add color



Paper material is twisted into thread that will be woven into furniture at the Lloyd Flanders factory in Michigan.

Wicker & Woven



Skilled craftsmen meticulously weave resin strands to create chairs for Ratana.



Part of Summer Classics' new White Label, this chair from the Sahara collection is made with the company's N-Dura resin weave in an on-trend finish called Kubu.

or effects such as antiquing to the furniture.

The looming process complete, hand craftsman-ship takes over again, with workers in Lloyd Flanders' Menominee, Mich., factory attaching the woven material to frames by hand.

"Our Lloyd Loom material is 'upholstered' onto aluminum frames," said Rosebrock. "Each piece is hand applied using custom-made equipment that allows our craftsmen to stretch the material in place, then staple the Lloyd Loom material into place using stainless steel staples."

Today, Lloyd Flanders offers nearly a dozen Lloyd Loom collections, ranging from more traditional styles such as the Nantucket collection to the sleek lines of the contemporary Elements collection.

FANTASTIC PLASTIC

While the Lloyd Loom is one of the oldest methods for producing wicker and woven furniture, it's certainly not the only one. Today's casual companies utilize innovative technology to produce resin wicker/woven material through a number of methods.

Many companies use highdensity polyethylene (HDPE) to produce the resin material for their wicker and woven furniture. This durable, recyclable thermoplastic made

GLOSSARY

TO TRULY UNDERSTAND WICKER/WOVEN PRODUCTS, YOU NEED TO SPEAK THE LAN-

guage. Here are a few key terms related to the product.

Warp In weaving, the threads on a loom over and under which other threads (the weft) are passed to create a woven material.

Weft In weaving, the crosswise threads on a loom over and under which other threads (the warp) are passed to create a woven material.

Cellulose An organic compound often derived from wood pulp and cotton that is used to produce everything from paperboard to derivative products such as cellophane.

Thermoplastic A plastic polymer that becomes pliable and moldable when heated and hardens when cooled.

Polyethylene (PE) The most commonly used plastic, made with a mixture of similar polymers of ethylene. The high-density version is more durable and used in furniture production.

Resin A solid or highly viscous substance.

Polyvinyl Chloride (PVC) The third most widely produced synthetic plastic, PVC comes in rigid and flexible forms. The rigid form is used in furniture.

from petroleum has a high strength-to-density ratio, making it ideal for products such as plastic bottles, pipes and furniture.

Durability aside, polyethylene offers a level of versatility design-wise that gives casual companies the ability to mimic the characteristics of natural wicker while also being able to play with color and texture.

"The PE material has gotten so much better; you can finish it, you can put texture on it, it's got memory," said Keith A. Crowe, global supply chain director, Alfresco Home. "It's just become a really easy product to build outdoor furniture with; it has

become more exciting because of the different colors and textures you can get with it."

The polyethylene used by Alfresco Home, and many other companies, starts as a powder that is then formed into small pellets, each with a different color. The pellets are poured into a vat that can heat to anywhere between 300 and 500 degrees Fahrenheit, where they melt, forming a molten plastic that then travels into a die that creates the individual strands. From the die, the liquid plastic goes through a cooling process to return it to a solid. At that point, a factory worker hand rolls the strands onto spools for weaving.

Wicker & Woven



Hand weaving allows Ratana to create natural-looking color variations in its woven furniture.

Polyvinyl chloride (PVC) also is used to create wicker/ woven material for casual furnishings. Similar to polyethylene, PVC is melted and molded into form to create threads for weaving.

During the creation process, the plastic is either mixed or coated with chemicals such as UV inhibitors that protect it from the elements and in some cases, add color and depth.

"UV and mold inhibitors are always an important part of the process, which happens as the material is created in the beginning," said Zac Bryant, vice president, merchandising outdoor, Lane Venture/Heritage Home Group. "Batch testing samples of each production run help to ensure the products live up to expectations

along with on-site monitoring for process and color target adherence."

WOVEN THREADS

Once strands of plastic resin are created, they go through the weaving process to be woven onto furniture frames. At Al Fresco Home, workers staple the material to the aluminum frame and then hand weave it into the shape of the chair. Depending on the complexity of the design, one chair can take anywhere from a few hours for a simpler design to several days for a more intricate one.

"We have inspectors there to make sure the lines are very straight," said Crowe. "And if we're using a couple of different colors, we don't want to see a heavy striping; we want it to blend so it looks

STANDING THE TEST OF TIME

JUST AS ITS STYLE IS TIMELESS, THE DURA-BILITY OF TODAY'S WICKER AND WOVEN FUR-

niture is almost as enduring. Even though it's built to last, most wicker and woven furniture needs little care to keep it in top shape, and it's important to educate consumers on proper care and maintenance.

"It's relatively maintenance free," said Lawrence Wong, U.S. sales manager, Ratana. "It just needs a periodic cleaning with mild soap and water; cleaning it regularly will help extend the life of the product."

Wong says protecting the furniture from the elements is important in locations with extreme weather conditions.

"Storing and covering the furniture in the off season will help the life of the furniture, especially if you're in an area of extreme weather, hot or cold," he said.

Helping consumers with proper care and storage can help them enjoy their furniture for years to come.

"With the exception of some extreme conditions, we expect with proper maintenance care that our woven product can last the lifetime of the consumer," said Zac Bryant, vice president, merchandising outdoor, Lane Venture/Heritage Home Group.

as natural as possible."

Ratana employs a similar process with its virgin (non-recycled) HDPE resin strands, with workers handweaving the material onto the frame.

"They attach the spoke to the frame and weave it onto the whole body, and then they do a trimming and then a braiding on the end part to finish it," said Winnie Ng, sales manager, U.S. and contract division, Ratana. "The craftsmanship is very important, and we use experienced weavers to know exactly what kind of tension to use and how to close off the weave."

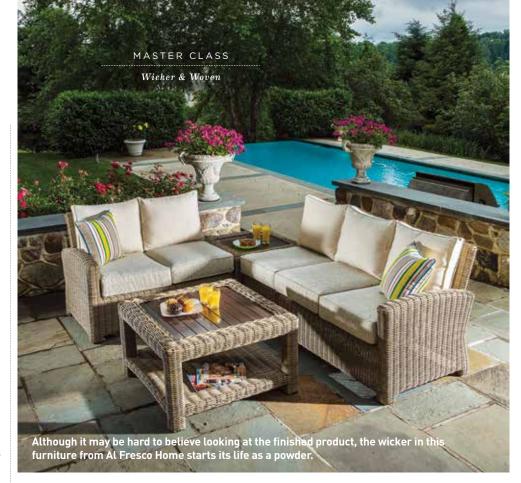
This method of handweaving material can be time consuming, but it allows companies to create one-of-akind pieces. Because of this, wicker and woven furniture often carries a higher price tag than furnishings made of other materials.

"It requires highly skillful workers, and it's very labor intensive. So as the cost of labor increases, so does the price of the furniture," said Lawrence Wong, U.S. sales manager, Ratana. "If people are looking for identical uniform pieces, it may vary slightly because it is handwoven."

FASHION FORWARD

No matter the era, fashion trends have played a large role in the design of wicker and woven furniture. From the ornate pieces of the Victorian Era to the tropical, Golden Girls-style looks of the 1980s, wicker and woven furnishings often reflect the fashion of the time.

"We're in the fashion industry," said Rob Robinson, public relations manager, Summer Classics. "Most retailers who simply wouldn't change their product offerings to follow changes in con-



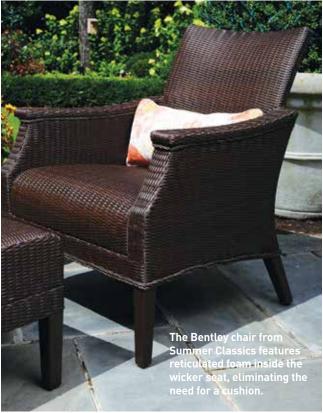
sumer taste aren't in business anymore."

Summer Classics has capitalized on current color trends in its wicker and woven offerings. The company's N-Dura resin wicker comes in on-trend shades that go beyond the traditional brown.

"New finish colors such as Slate Grey and Oyster are popular," adds Robinson.
"Bentley is a new group upholstered in resin wicker over reticulated or expanded foam. It doesn't have a cushion but has a soft sit."

And today's wicker/woven comes in the same sleek, modern shapes often found in contemporary furnishings made with teak, aluminum and the like. The versatility of the material gives casual companies the ability to evolve with the times, ensuring wicker and woven's place in the industry for years to come.

"Wicker is such a creative material to work with," said Bryant. "I've been working with this material for more than 20 years, and I've never



felt like we were duplicating a weave pattern or color direction. There is so much flexibility in the shape of the material, color, texture, patterns that you weave and the shapes that you weave them on; it really is endless.

"Working with that much freedom is a lot of fun."