HARDWOOD PLYWOOD
From Seed to Finish, We Do it All.
Hardwood plywood. It’s as attractive as it is versatile, reflecting nature’s understated beauty alongside technological breakthroughs. And for over 90 years, Timber Products Company has pioneered hardwood plywood manufacturing, creating products that are unrivaled in quality, craftsmanship and environmental responsibility. Today, all of our hardwood plywood is environmentally certified and meets the strictest emission requirements in the world.

When you’re dedicated to providing the most impressive hardwood plywood on the planet, you take the entire process seriously. As one of the nation’s largest independently owned hardwood plywood manufacturers, we control every step in producing our premier hardwood plywood. It’s something we like to call vertical integration.

It means that each and every product that bears our name is designed and engineered to the highest standards and, most importantly, isn’t compromised by middlemen. From our responsibly managed timberlands in northern California, to the ten manufacturing mills we own and operate across the nation, to utilizing our own trucking division to transport our products, our quality is never left to chance.

It’s this obsessive commitment to excellence that allows Timber Products Company to offer unequaled quality and the industry’s best service, and to remain a tremendous resource, not only for our customers, but also for the environment.
Real Beauty.
Real Quality.
Real Wood.
Nothing compares to the timeless beauty of natural wood. That’s why Timber Products’ hardwood plywood features real wood veneers handpicked by seasoned professionals. It takes more time, but there’s just no comparing the precision of an experienced eye, carefully scanning each and every piece of hardwood veneer to ensure it exemplifies the rich character, grade and appearance of each species.

In fact, we’re so obsessed with providing quality hardwood veneers that we built our own state-of-the-art veneer mill in Munising, Michigan. It is one of the largest mills of its kind in North America, and supplies our hardwood plywood mills with a wide range of rotary maple veneer, along with oak, birch and cherry.

Timber Products Company hardwood plywood is available in many species; the options below are a sampling of available hardwood veneer.
Welcome to the cutting edge of hardwood plywood.
**It all comes down to the grain.** Whether it's red oak, maple or an exotic like anegre, a hardwood’s grain is responsible for its unmistakable beauty and appeal. Which means consistency and quality are paramount when it comes to producing hardwood veneers. That’s why Timber Products uses four unique processes to produce a range of wood patterns that are graded and sorted by hand, ensuring a reliable grain pattern on each and every panel.

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**Rotary**

The log is centered in the lathe and turned against a knife blade at a slight angle following the log’s annular growth rings, producing a multi-patterned grain veneer.  
**Ideal for:** Large surface applications where a broad grain pattern will suffice. Rotary cut sheets are generally less expensive than sliced veneer and can yield whole piece face sheets.

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**Quarter Slicing**

Produces a narrow, striped grain veneer where the growth rings of the log strike the blade at approximately right angles. Some species will create a series of straight stripes, while others' stripes may be varied in angle and length. Red and white oak produce a pronounced flake pattern when quarter sliced, while mahogany creates a ribbon stripe pattern.  
**Ideal for:** Mission-style or other applications requiring a uniform appearance with generous ray flaking. More cost-effective than rift-cutting.

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**Rift Cut**

Produces a rift or comb grain effect similar to that of quarter slicing, but generally is only used with red and white oak. This process minimizes ray flake as the log is cut at an angle of about 15 percent off the quartered position.  
**Ideal for:** An application calling for uniform white or red oak appearance without ray flake. Generally higher in cost due to low yields.

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**Plain Slicing or Flat Cut**

The most common slicing method that produces a distinct cathedral grain veneer. A half log, or flitch, is mounted so that the veneer is cut along the growth rings, parallel to a line through the center of the log.  
**Ideal for:** Any application where an eye-catching pattern is desired at an affordable cost; of the slicing methods, plain slicing is the least expensive.
Clearing the Air
For nearly 100 years, Timber Products Company has pioneered hardwood plywood manufacturing. Today, all of our hardwood plywood is environmentally certified and meets the strictest emission requirements in North America.

CARB- and LEED®-Compliant
Our award-winning products are a testament to our environmental stewardship and leadership.
- Engineered with innovative EcoBind Resin
- CARB-Compliant
- LEED®-Compliant
- FSC® Chain-of-Custody certified upon request

FSC Chain-of-Custody Certification
Along with its innovative adhesive that reduces VOC off-gassing, Timber Products’ hardwood plywood features FSC Chain-of-Custody (CoC) Certification. These exclusive designations certify that our hardwood and softwood are sourced only from responsibly managed forestlands, and are meticulously tracked to ensure your order is certified and documented to meet green building program requirements.

Our commitment to excellence allows Timber Products Company to offer unequaled product quality and the industry’s best service. From our responsibly managed timberlands to finished products, we are a tremendous resource to our customers and a steward of the environment.

It’s what’s on the inside that counts.
Our hardwood plywood products have emission levels that approach the low levels from natural wood.

**Formaldehyde emissions in parts per million (PPM)**

<table>
<thead>
<tr>
<th></th>
<th>Natural Wood</th>
<th>NAUF* (Soy)</th>
<th>NAF*</th>
<th>ULEF*</th>
<th>HUD</th>
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<tr>
<td>.05 ppm</td>
<td>.007 ppm</td>
<td>.007 ppm</td>
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<td>.20 ppm</td>
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*Each of these levels are below the CARB II requirement of .05 ppm, the most stringent emission requirement in North America.

**Emission Facts**

Formaldehyde is a simple chemical compound made of hydrogen, oxygen and carbon, with the formula CH₂O. All organic life forms—bacteria, plants, fish, animals and humans—make formaldehyde at various levels. Formaldehyde does not accumulate in the environment or within people, as metabolic processes quickly break it down in the body and the atmosphere. It has become an essential part of the production of hundreds of beneficial products that are used every day in homes and factories. Formaldehyde-based technologies are an important part of the U.S. economy, as they are used to produce a wide range of materials.
In the world of hardwood plywood, there's no such thing as “one size fits all.” That's why Timber Products Company offers many unique substrates that provide optimum quality and performance for every application, even those calling for custom solutions. We also offer fire-retardant, water-resistant, no-added-urea formaldehyde and poplar and lauan blank cores.

**Veneer Core** *(White Fir and Douglas Fir)*

We manufacture one of the industry’s finest softwood veneer cores using trees harvested from our own forestlands and peeled at our facility. The quality of our softwood veneer yields a core that is consistent in thickness and a wood veneer laminating surface that is second to none.

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<thead>
<tr>
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<tr>
<td>Cost</td>
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<td>Laminating Surface</td>
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<td>Screwholding Strength</td>
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**Medium-Density Fiberboard Core**

Our medium-density fiberboard core can be machined to the finest tolerances without chipping. It provides an exceptional laminating surface that is smooth, hard and consistent throughout the panel.

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**Particleboard Core** *(Commercial and Industrial Pine and Fir)*

Our specially engineered particleboard core provides the perfect density on the face and back to accept laminates of all kinds, and a core that delivers physical properties to make it a workhorse for many applications.

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**Pro-Core MDF**

Pro-Core MDF uses MDF crossbands and a veneer core interior to deliver the best performance of any core material we offer. The MDF face and back offer the best laminating surface, and the veneer core delivers the best physical properties and lighter weight.

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**FeatherPly**

Manufactured from falcata veneers, FeatherPly maintains the integrity of standard veneer cores while weighing 40% less. Optimal for applications where weight is crucial, our core is also easily machinable, adding life to your tools.

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1 = Poor  
2 = Below Average  
3 = Average  
4 = Above Average  
5 = Excellent
Timber Products’ mill in Corinth, MS manufactures a variety of hardwood plywood panels to meet the needs of the woodworking industry. Our SpecialT hardwood plywood panels use an OSB core made from renewable, small diameter, fast-growing trees, giving you a reliable source of quality panels at a very reasonable price.

- Made from high-density OSB, this is not a standard OSB used to manufacture houses.
- OSB panels are sanded and calibrated to have less thickness variation than veneer core panels.
- All veneer species and cuts can be laminated to an OSB core.
- Edgebanding is available.
- The NAUF core is combined with Timber Products’ NAUF glue options for a complete NAUF panel.
- Prefinishing is available at our Corinth facility.
- Available with MDF or tropical cross bands.
- ½” and ¾” thicknesses.
- Excellent screwholding and machinability.
- Great laminating surface.
- Easy, fast finishing.
- Consistent availability.

### OSB Core Specifications*

<table>
<thead>
<tr>
<th>Construction</th>
<th>MOR</th>
<th>MOE</th>
<th>Screw Hold Face</th>
<th>Screw Hold Edge</th>
<th>Weight (lbs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSB Core</td>
<td>3530</td>
<td>653,000</td>
<td>287</td>
<td>218</td>
<td>85</td>
</tr>
<tr>
<td>Particleboard Core</td>
<td>1885</td>
<td>290,100</td>
<td>202</td>
<td>120</td>
<td>100</td>
</tr>
<tr>
<td>MDF Core</td>
<td>3300</td>
<td>340,000</td>
<td>225</td>
<td>200</td>
<td>100</td>
</tr>
<tr>
<td>7-Ply Veneer Core</td>
<td>6422</td>
<td>619,000</td>
<td>265</td>
<td>208</td>
<td>72</td>
</tr>
</tbody>
</table>

*Information was obtained from ANSI standards and spec sheets supplied by vendors of the components.
Excellent, attractive and consistent, TimberPly panels have beauty all the way to the core.
TimberPly is a premium quality veneer core panel containing alternating bands of long-grain and short-grain birch, providing a unique panel edge not found in typical veneer core products.

TimberPly is a perfect solution for an exposed edge project such as drawer sides, fixtures and furniture.

These panels offer superior flatness and contain fewer voids than a typical veneer core panel. This allows the panel to be processed more easily and machined consistently.

Sizes and Tolerances
- TimberPly panels are manufactured in 4’x8’ panels
- Available with most face and back combinations
- Thicknesses are available in ¼” and ⅜” 13-ply
- Tolerances comply with HPVA/ANSI Standards

Finishes
Along with our other hardwood plywood products at Timber Products Company, TimberPly panels can be specified with our innovative RhinoCoat flatline UV finish, perfect for low-wear applications.

Features and Benefits
- Minimal voids
- Excellent performance
- Attractive edge
- Easy to process
- CARB-compliant
- NAUF and FSC® options
- Meet the most stringent environmental regulations
Performance is in the Finish.
Enhance the beauty of your natural wood products with Timber Products Company’s RhinoCoat™ prefinished panels.

RhinoCoat UV prefinishing is applied using an innovative ultraviolet curing technology, which contains no harmful volatile organic compounds (VOCs) and emits zero formaldehyde. By reducing the need for on-site spray finishing and drying in low-wear applications, RhinoCoat prefinished hardwood panels can help you increase your throughput, reduce factory emissions, enhance quality and improve overall manufacturing efficiency by allowing finishing labor to focus on more critical areas of production.

Because we know you need flexibility in your projects, RhinoCoat prefinished panels are available in a wide range of sizes, thicknesses, veneer species and core materials. Our finish has been engineered to meet your requirements and has been tested against multiple industry standards. RhinoCoat prefinished panels can be customized to meet your needs for every application and are offered in a variety of gloss levels.

UV Curing Technology
Ultraviolet curing technology is one of the most environmentally conscious ways to finish a product. UV curing contains no formaldehyde and no harmful volatile organic compounds. In addition to the environmental benefits, RhinoCoat UV finished panels provide you with a durable surface for low-wear applications and won’t show any effect from common household chemicals, foods or solvents.

Cost Advantage
To help you control expenses, the overall finish cost for UV-cured panels is well below traditionally applied coatings. Our flatline process helps reduce waste by allowing excess finish to be recycled and reapplied. You’ll also see additional cost advantages with RhinoCoat panels through improved production and labor efficiencies.

Multiple Applications
RhinoCoat prefinished panels are a perfect solution for applications such as drawers, cabinet interiors, interior shelves and other low-wear applications.

In addition to the natural aesthetic qualities and premier finishing properties, RhinoCoat panels are built to meet these performance standards:

<table>
<thead>
<tr>
<th>Standard</th>
<th>Requirement</th>
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<tbody>
<tr>
<td>ASTM D 968</td>
<td>Falling Sand Abrasion Resistance Pass 7 liters falling sand</td>
</tr>
<tr>
<td>ASTM D 1308</td>
<td>Effect on Household Chemicals Pass covered spot test</td>
</tr>
<tr>
<td>ASTM D 2197</td>
<td>Scrape Adhesion Balance Beam Scrape Tester (Belmar) Pass 5 Kg load</td>
</tr>
<tr>
<td>ASTM D 3359</td>
<td>Cross Hatch or X Scribe Tape Adhesion Pass 4B-5B</td>
</tr>
<tr>
<td>ASTM D 3363</td>
<td>Pencil Hardness Pass 2H (test results may be skewed due to hardness of face veneer or core)</td>
</tr>
<tr>
<td>ASTM D 4060</td>
<td>Abrasion Resistance Using Taber Abraser Pass 500 cycles CS-17 abrasive wheel</td>
</tr>
<tr>
<td>AWI 1500-G-6</td>
<td>Standard Production Finishes; AWI-G-7 Specialty Finishes Equals or exceeds all finishes listed in these designations. Refer to AWI 1500-G-9 Finish System Performance Table.</td>
</tr>
<tr>
<td>AHA Class II Hardwood</td>
<td>Passes tests that would be relevant to hardwood plywood</td>
</tr>
<tr>
<td>ASTM D 2794</td>
<td>Impact Test Pass 20 inch-pounds of direct impact</td>
</tr>
<tr>
<td>KCMA/NKBA Chemical Reagents (similar to ASTM 1308 as listed above)</td>
<td>Pass all tests</td>
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