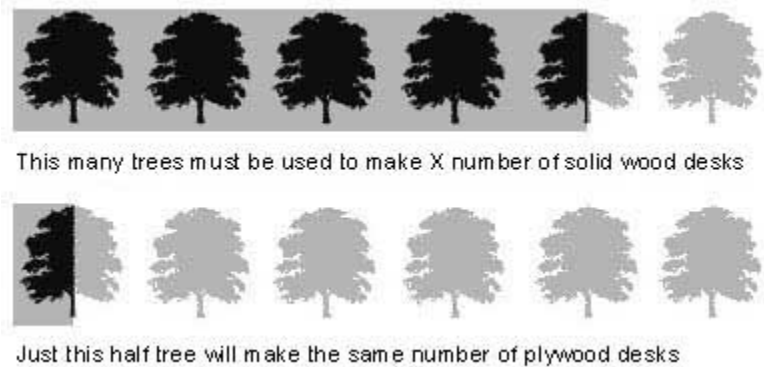


ECO-FRIENDLY PLYWOOD FURNITURE

Plywood furniture has been around for a little over 100 years and its manufacturing techniques have been explored by a handful of designers including Aalto, Eames, Danko, Pfeiffer, and now Legare's talented designer, Brock Brandenburg. This sustainable material is extremely efficient as the chart (below) demonstrates. Legare Signature™ furniture is made from the finest grade Baltic Birch plywood.

PLYWOOD FURNITURE FACTS

1. Producing plywood yields 8-10 times more usable wood from a log versus solid lumber.
2. Plywood furniture has greater potential to outlast solid wood furniture.
3. The energy utilized in converting wood from a raw material to a finished product is minuscule when compared to any other industrial material.



Making solid wood furniture can be an extremely wasteful process. Just think about the fact that a log is round while a wood board is rectangular. When a rectangular board is cut from a round log, all that wood in the circumference is wasted. Sure, some of it is recycled into chip-board, but chip-board is mixed with an almost equal volume of urea formaldehyde resin, an extremely toxic substance. Not cool and not healthy.

Plywood, on the other hand, utilizes an efficient log peeling process. First, the logs are cut to a length ordered by the mill. Then the log is put on a lathe. As it turns, the bark is removed and the veneer is peeled with a knife and comes off the log like paper towels come off a roll. The waste in this process is extremely minimal. The veneer plies are then glued together with very minimal formaldehyde content resin adhesives (E1 grade contains less than 5% formaldehyde content).

In the hands of Legare's creative furniture designer, Brock Brandenburg, the finished product takes on a stunning array of simple yet sophisticated shapes and curvilinear designs which are precision cut on CNC (computer numeric controlled) machinery to create our modern award winning furniture products.

ENGINEERED COMPOSITE WOOD

Engineered Composite Wood includes a range of derivative wood products which are manufactured by binding together the strands, particles and fibers of wood, together with adhesives, to form composite wood panels. This material is engineered to precise design specifications which are tested to meet national and international standards.

Engineered wood panels are made from the same hardwoods and softwoods used to manufacture lumber. Recycled sawmill scraps and other wood waste is used for engineered wood composed of wood particles or fibers, and thin layers of whole ash and oak logs are used to produce the surface veneers. Alternatively, it is also possible to manufacture similar engineered cellulosic products from other lignin-containing materials such as rye straw, wheat straw, rice straw, hemp stalks, or sugar cane residue, in which case they contain no actual wood but rather vegetable fibers.

Engineered composite wood products are used in a variety of ways, often in applications similar to solid wood products. Engineered wood products may be preferred over solid wood in some applications due to certain comparative advantages:

- Because engineered wood is man-made, it can be designed to meet application-specific performance requirements.
- Large panels of engineered wood may be manufactured from fibers from small diameter trees.
- Small pieces of wood, and wood that has defects, can be used in many engineered wood products, especially in medium-density fiber based boards.
- Engineered wood products are often stronger and less prone to humidity-induced warping than equivalent solid woods, although most particle and fiber-based boards readily soak up water unless they are treated with sealant or paint.

MEDIUM-DENSITY FIBERBOARD

Medium-density fiberboard (MDF or MDFB) is an engineered wood composite product formed by breaking down softwood into wood fibers, often in a defibrator, combining it with wax and resin, and forming panels by applying high temperature and pressure. It is a building material similar in application to plywood but made up of separated fibers, not wood veneers. It is denser than normal particle board.

Large-scale production of MDF began in the 1980s. Its name derives from the distinction in densities of fiberboard. MDF typically has a density of 600-800 kg/m³, in contrast to particle board (160-450 kg/m³) and to high-density fiberboard (500-1450 kg/m³). Similar manufacturing processes are used in making all types of fiberboard.

MDF is also known as Customwood or Craftwood.