



SUBSTRATES FOR WOOD VENEER

Substrate is composed of at least three elements: a face, a back and a core. These three elements are held together by an adhesive. Consideration should be given to special requirements of each core such as fire and water resistance, weight, flatness, rigidity and strength required. There is a large number of different cores used with wood veneer including:

Particleboard Core: composed of multiple layers of refined wood particles which vary in size and are bonded together with a synthetic resin or binder under heat and pressure. This product is commercially classified by "density," which is measured by the weight per cubic foot of the panel product. Medium density industrial particleboard is used in the broadest applications of architectural woodwork.

Medium Density Fiberboard: all of the wood particles in the board are refined to a very small size in a moderate pressure steam vessel, combined with a resin, and bonded together under heat and pressure. Medium-density fiberboard (MDF) has a surface that is flat, smooth, uniform, dense and free of knots or grain patterns. It makes a superb carrier for veneers and can be enhanced to a fire-retardant, moisture-resistant or bendable core.

Veneer Core: three or more layers (plies) of wood veneers are pressed together in alternating perpendicular layers balanced on either side of a central core layer and glued into a single sheet. This core is more prone to surface irregularities and defects, but it offers greater strength in bending and in stress than other core types. High-quality, calibrated veneer core, with as many as 13 plies, is recommended for architectural veneer panels; this eliminates the surface irregularities and defects.

Composite Core: constructed of veneer core inner plies from agricultural waste products with particleboard or medium density fiberboard as crossbands. This core tends to offer more consistent tolerances and flatness than standard veneer cores.

Combination Core: specialty core produced from products such as waferboard or strand board that increases the utilization of remaining resources. Typically made from a composition or veneer center core with balanced veneers applied for stability and face veneer uniformity.

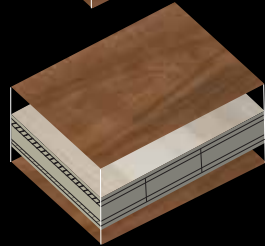
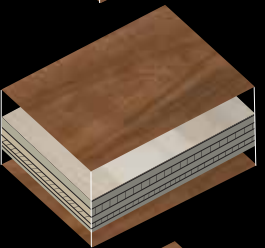
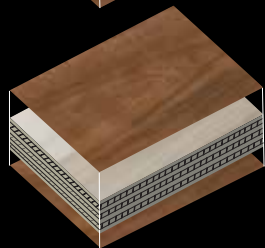
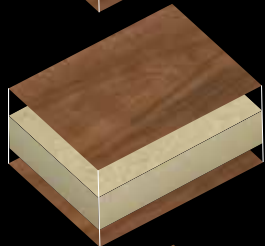
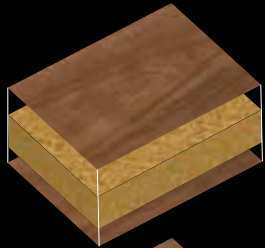
There are many other core materials that meet specific purposes, i.e.: LEED Projects (FSC/ formaldehyde free), light weight, fire rated, etc. Please consult the panel manufacturer links below for more information.

http://www.timberproducts.com/Products/Hardwood_Plywood/

<http://www.sierrapine.com/architects/specifications/>

<http://www.awinet.org/designprofessionals/index.cfm>

<http://flakeboard.com/designers.asp>



M. BOHLKE VENEER CORP.

8375 N. Gilmore Road | Fairfield, OH 45014 | P: 513-874-4400
spec@mbveneer.com | www.mbveneer.com

