

Printing and Converting Wood Veneer

Background

Avery Dennison 119# Cherry Wood and 128# Birch Wood are smooth, real wood veneer label materials. The label surface has just enough hand-feel so you know it's real wood, but is smooth enough to be printed and converted. Because this is a true wood product with natural grain patterns, no two labels will look the same. Testing is required to ensure the printing process is capable of providing a quality finished appearance.

- > Our wood veneer is a 9.0-9.5 mil laminated to a PET carrier film
- > The veneer has a repeat of 25.5" with no shim or weld lines visible
- The woods high opacity will lend itself to be used with all label gap sensor types. Roller diameter size should never drop below 1" or 25 mm

Prepress Considerations

This product is a very open, highly porous material so graphics may need to be adjusted to account for the absorption of inks and coatings. The use of a primer will minimize these changes and is highly recommended.

- > The wood grain direction is in the cross direction of the roll material. If the paper absorbs moisture, it will grow in the MD, opposite of what is seen in regular paper label materials
- > This product can be used with four-color printing processes
- The wood will have natural defects, this includes dark spots or possibly even a small hole.



Priming

Some processes may require the use of a primer for good ink holdout or adhesion. The product is much like an uncoated paper in this respect. Determining the type or how much primer to apply will need to be done at the converter level, since each print process type will differ.

- Priming will help in the end use for better water and moisture resistance
- > Priming can change the color of the material, making it slightly darker

Printing

This face material can be tinted with a translucent ink, so the color of the wood can be matched to look like many other types of woods. The texture of the face may require higher impression pressures to help drive the ink into the natural irregularities of the wood grain (See photo 4)

- > Higher viscosity inks have better hold-out and seem to work better with this material
- > UV flexo will work better than water-based flexo, but both can work on the material
- The face material has been printed with water-based and UV flexo, waterless and UV offset, flat and rotary screen, and digital





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Embossing

Wood veneer will take a limited emboss. If the emboss is too deep or with hard edges, it may crack the wood material. Shallow relief with rounded edges will work best. Consult your die suppliers for their product recommendation.



Overprint varnishes

The use of an overprint varnish is highly recommended. As with paper face materials the OPV will help reduce penetration of water or moisture and give better resistance to abrasion and scuffing. Any OVP should work, however matte varnishes help to maintain the stock, flat finish of the material.

Die Cutting

Since this product has a PET carrier film, it will die cut and strip very easily with engraved or magnetic dies. One consideration is the caliper of the material, 9.0+ mils thick. This may require a deeper cell or floor in the die. Consult with your die supplier about the use of this material so they can recommend the correct tooling design and tolerance.

Cold and Hot Stamping

The product will successfully cold or hot stamp, but it will have some limitations due to the texture of the surface. The foil may not break away with clean sharp edges or could have drop-out points, where the foil is not adhering.

For cold stamping this may require a heavier deposit of foil adhesive to help fill in the low spots within the grain. Hot stamping may require more pressure, a slightly longer dwell time and possible changes in the heat settings. The higher pressures may help drive the foil into the low spots, but may also flatten the substrate slightly.



Labeling

The stiffness of the material lends itself for easy removal from a release liner and presentation off the peel blade for a substrate. Stiff small diameters are not recommended, however, the grain direction in the CD does allow smaller diameters than normally expected. The material is very opaque so all label gap or position sensors will work well with it. As with every application, test the label on the product for complete fitness for use.

Storage

It is recommended to store this product in standard conditions, 72° F and 50 percent RH, and keep the press rolls wrapped until ready for use. The normal one year shelf life applies to these materials for storage in the converting environment.

All comparisons are believed to be reliable and accurate. However, the furnishing of such information and comparisons is for reference purposes only and does not constitute a warranty of any kind. Actual product performance should always be tested for fitness-for-use.

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Label and Packaging Materials