

Printing and Converting Wood Veneer

Background

Avery Dennison Fasson® Birch Wood and Cherry Wood products are smooth, real-wood veneer label materials. The surface provides the texture of genuine wood, and is also smooth enough for printing and label converting.

Because this is a true wood material with natural grain patterns, no two labels will look the same. It offers the natural beauty that only real wood can and these materials can thus provide a truly premium and unique finished result.

Testing is required to ensure that the labels are fit for the end use purpose, and that the printing process is capable of providing a good finished appearance of the material.

True Wood Material

The wood face material is comprised of a thin veneer of wood shaved directly from a log and laminated to a thin PET carrier. The wood will have natural defects, such as dark spots, cracks, general wood bruising or even a small hole.

As it is 100% natural wood, the color shade and grain pattern can vary between batches, or even within a roll, and label color can shift over time, as storage conditions may affect the label. There can be caliper variations between batches.

Each tree, each log is different and therefore each label is unique. Designs benefit from the natural variations, and the wood itself becomes part of the artwork.

Prepress Considerations

The wood grain direction is in the cross direction (CD) of the roll material. If the facestock absorbs moisture, it will grow in the machine direction (MD) - the opposite behaviour to regular paper label materials.

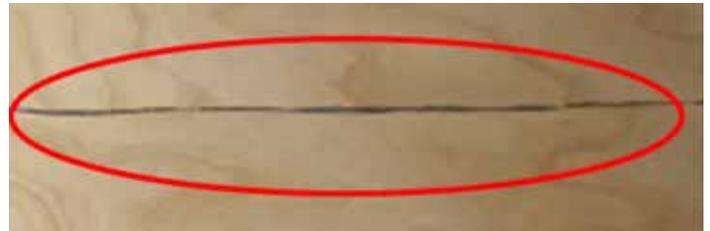
Each log used by our supplier to create the wood veneer material can be a different diameter, which affects the total length of veneer that can be obtained. Wood defects and the fragility of the peeled wood also limit the total usable length, and thus affect the number of splices you see in a roll. There are two types of splices in the face material itself:

1. Tape splice



A tape splice is a section of the face material where both the wood and the PET carrier have been cut to remove defects and then taped together on the backside of the carrier with a thin transparent tape. The maximum number of splices per 5000 ft roll is 10.

2. Wood separation



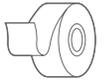
Since wood has natural defects (such as knots, cracks, general wood bruising and small holes), large defects that might compromise performance are removed during material production. The PET carrier remains constant and untorn. There can be up to 140 wood separations in a 5000 ft roll (the average is approx. 70 wood separations or fewer).

Priming

This product is a very open, highly porous material, so graphics need to be adjusted to account for the absorption of inks and coatings.

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. The type of - or how much - primer to apply will need to be assessed at the converter level, since each print process type will differ.

- > Priming will help seal the face material for better printing, and help in the end application with better water/moisture resistance
- > Priming can change the color of the material, making it slightly darker



Printing

- > The Birch and Cherry wood materials can be printed with water-based and UV flexo, offset, flat and rotary screen, letterpress process and digital (if topcoated or printed with fast drying inks).
- > UV flexo will work better than water-based flexo, but both can work on the material
- > Higher viscosity inks have better hold-out and seem to work better with this material than low viscosity inks.
- > Using conventional heat-set inks is generally something we do not recommend. Oxidizing inks work very well.
- > When printing on Cherry Wood, ink color may need to be adjusted to compensate for the red/brown color of the wood.
- > Additionally, using a hit of white can help to maintain ink colour on top of the Cherry Wood.
- > Higher viscosity inks have better hold-out and seem to work better with this material than low viscosity inks.
- > We recommend adding trim marks to all web print files. Without printed trim marks, the press may read the natural wood grain pattern and then misinterpret where to print and/or diecut the form.

Embossing



The Birch Wood and Cherry Wood materials 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.



Foil stamping

The product will successfully cold or hot stamp, but there will be some limitations due to the texture of the surface. Pre-testing your foil choice is required to achieve your desired results.

Overprint varnishes

The use of an overprint varnish (OPV) is highly recommended. As with paper face materials the OPV will help to reduce penetration of water or moisture, and give better resistance to abrasion and scuffing

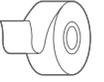
Die cutting

Since this product has a film underlamine, it will die cut and strip very easily with engraved and magnetic dies. Because these wood labelling products are true wood materials, the product has to be cut with dies adapted to it, and it can generate wood dust. Another consideration is the caliper of the material. Consult with your die supplier about the use of this material, so that they can advise on correct tooling design and tolerance.

Labeling

Stiff, small diameters are not recommended. However, the CD grain direction does allow smaller diameters than normally expected. The material is highly opaque, so all label gap or position sensors will work well with it.

Birch Wood and Cherry Wood labels can be applied to bottles and containers * using automated label application equipment, as long as the wood grain is running top to bottom (portrait) on the container.



Ask us

The steps described in this printing guide give you the insights needed to create truly premium and unique finished results with Cherry Wood and Birch Wood.

Avery Dennison offers all of the technical support needed to ensure successful application results.

If you have questions about Cherry Wood or Birch Wood or any other product, please contact your Avery Dennison sales representative.

*Under tested conditions

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