

## Coatings 101

Coatings are used to protect a document from scuffing or scratching or to make a document look better (to draw attention to certain areas or to add depth to image(s)).

### TYPES OF COATINGS

#### VARNISH

Adding varnish is more or less like adding another ink (an ink with no color). Varnish can be wet-trapped (added when other inks are added), or dry-trapped (added after the other inks have dried). Dry-Trapped varnish usually makes for a glossier finish. There are three choices for varnish: glossy (hi-gloss), satin (medium gloss) or dull (low gloss). If requested, varnish can be tinted by adding pigment(s).

#### UV

When your document is UV coated, it is covered with a clear liquid then cured instantly with ultraviolet light. UV coatings can be either gloss or dull, and can be applied to a specific area/image (spot coated) or cover the entire paper (flood coated).

UV coating offers the most protection and a more obvious shine than any of the other coatings. Because it's cured with light and not heat, no solvents enter the atmosphere, but items with UV coating are more difficult to recycle than similar items with other types of coatings.

It is also important to know that because UV coatings are very thick, they may crack if scored or folded. Double check with your printer to ensure that a UV coating is appropriate for your project.

#### AQUEOUS

Aqueous coatings are water-based making them more environmentally-friendly than UV coatings. Aqueous coatings can be gloss, satin, or dull and are only available in a "flood" (covering the entire document).

Aqueous coatings are more durable than varnishes. They do not absorb into the press sheet like a varnish coating, and are not susceptible to cracking or scuffing. Aqueous coatings, however cost roughly twice as much as a Varnish..

#### LAMINATES

Laminates can be film (a clear plastic film laid over the paper) or liquid (spread onto the paper like a varnish). They can have a gloss or matte finish. Laminates protect paper from moisture and are good for protecting items that are handled regularly (ie. Menus). Laminates are also available as a porous, lay-flat coatings (the interior of which is covered with numerous "V"-shaped cuts in the plastic that minimize the "curl" that often occurs with basic laminates).

Laminates take time to apply and are usually costly, however they provide strong, washable surfaces, and remain the superior choice for protecting items that are regularly handled and need to last.

## Things to Remember When Considering a Coating.

- Many inks (especially dark colors) show fingerprints and scuffing if not protected with some type of coating.
- Varnish is the least effective way to prevent scuffing. Bindery coatings like UV and laminates are far better for protecting items that are multi-packaged and shipped ( ie. Books). Even an aqueous coating is much stronger than a varnish and can therefore withstand shifting and shuffling without scuffing.
- Discuss coating options with your printer. All printers can apply varnish(es), but some only some can apply laminates, UV, or aqueous coating(s).
- Coatings should be the LAST finishing step on your publication. You cannot print, glue, or foil stamp over ANY type of coating. There must be an “uncoated window” if you plan to do any of these things after the coating is applied.
- Varnish applied to uncoated paper is absorbed and wasted. You should only varnish stock that is coated.
- Discuss with your printer the effects of applying coating to your materials. Coatings may affect/deepen the color of the ink they cover, or discolor ( now or with age) and paper they are applied to.