

TECHNICAL BULLETIN 5.4



Processing tips for Avery® DOL™ films

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Introduction

Overlaminating of printed images with transparent films is necessary to provide maximum performance of finished images: it provides gloss, colour depth and protection.

Inkjet/printed images require overlaminates for protection against UV radiation, abrasion and moisture.

Overlaminates also enhance the colours of the image and provide it with the required finish: e.g. a gloss finish for outdoor use and a matt or lustre (semi-gloss) finish to avoid unwanted light reflections when used indoors.

The information provided in this document can also be found on our website,
www.academyaverygraphics.com. This website also contains instructional How-to videos and additional theory modules.

Lamination

1. Prior to lamination make sure that

- rollers of the laminator are clean and not damaged
- rollers are parallel to each other
- rollers are set at the correct temperature and pressure
- material is laminated in the centre of the laminator, in case the materials are narrower than the laminator.

2. To operate the laminator, the following settings are recommended:

Avery DOL Range vs. settings	Pressure (psi)	Speed (m/min)	Roller temperature(°C) ¹
DOL 1030 / 1130 DOL 1460 / 1480	50-70	0 - 2.5	20
DOL 1000 / 1100 / 1800 DOL 2000 / 2100 / 2200 DOL 2800 / 2900 DOL 3000 / 3100 / 3200 DOL 4000 / 4100 ² DOL 4300 DOL 5900 / 6000 / 6100 ³	50-70	50-70	20-35

¹ Roller closest to the laminate

² Both DOL 4000 and DOL 4100 only in conjunction with Avery Perforated Window Films

³ Only in conjunction with Avery Floor Marking films

DOL 4400 UV ⁴	50-70	50-70	35 Preferred
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3. Always set the lamination tension of the overlaminates and the printed substrate in such a way that they are laminated flat but without stretching.

Improper tension adjustment is THE major cause for wrinkles and possible delamination. This is caused by the tension difference of the laminate and media.

4. Please note that increased roller temperatures in combination with higher winding tension could lead to unwanted elongation of the film and image. Winding tension should therefore be carefully monitored and kept at an appropriate level.

Because laminates such as Avery DOL 1460 or Avery DOL 1480 are designed to be extremely conformable, they need to be applied with care. Recommendations made in this technical bulletin must always be taken into consideration.

5. For specific settings on the laminator, please consult the technical manual which was supplied with the laminator from the original supplier.

Images printed with UV curable inks

Images printed with UV ink can have a certain minute-structured surface. This is a result of the ink type that has been used and the amount of ink deployed, and is typical for these inks. This structure can become visible after overlamination. Extremely thin lines of air caught between the surface structure of the ink and the laminate appear, optically creating an effect called "silvering".

⁴ Only in conjunction with images printed with UV curable ink

