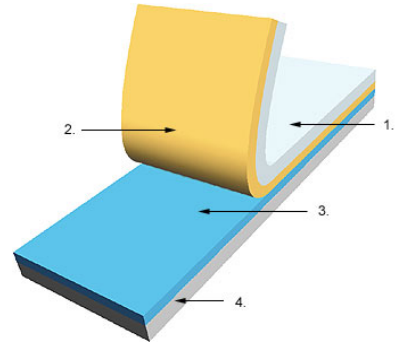


TL no 1 STORAGE and HANDLING CONDITIONS for SELF-ADHESIVE MATERIALS

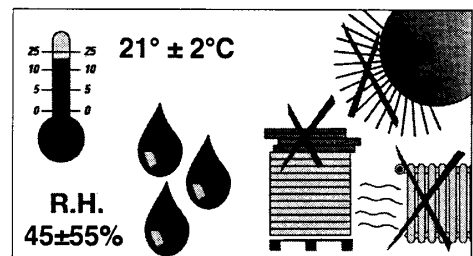
A self-adhesive product is a sandwich material. Face Stock and liner are not necessarily of the same nature, therefore they can react differently in varying "moisture" and temperature conditions.

1. Face Stock
2. Adhesive
3. Silicone
4. Backing



The pressure-sensitive material should be stored:

- in its original packaging
- between 45-55% R.H. at 21 °C +/- 2 °C
- and kept away from heat sources.



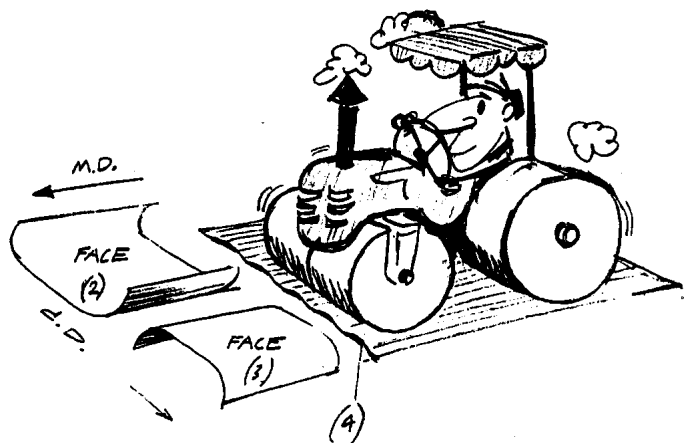
At higher humidity, the material will absorb moisture and "curl" face up (2),
At lower humidity the material will lose moisture and curl towards the liner (3).

Unwrapped material that is too cold (e.g. out of the storage room at 5 °C) and brought into the print shop which is at room temperature, will pick up moisture from the air.

As a result "wavy edges" will occur. This will give feeding problems on the press (4).

On the other hand storage at high temperature could induce adhesive bleed, "shrinkage" of the material and cause strike through.

Therefore, before starting a print job, always condition the material 48 hours at the above indicated moisture and temperature ranges **WITHOUT UNWRAPPING**.



This will guarantee a perfect stay-flat of the material during the printing and guillotine cutting stages. Sheets left overnight in the print shop should be covered to protect them from moisture exchange with the environment.



The dimensional stability of the sheet is dependant upon:

- the nature of the material,
- the storage conditions,
- drying after printing (heat).

Paper

During the paper making process the fibres are oriented in the machine direction (MD).

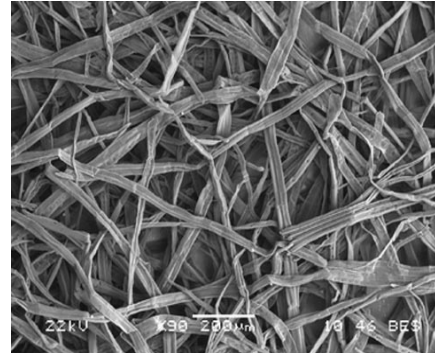
Moisture is always absorbed in between the fibres.

Therefore paper expands (curl face up) or retracts (curl towards the liner) mainly in the cross direction (CD, i.e. the width of the paper).

Films

Filmic face stocks are mostly sensitive to heat.

Excessive "heat" through drying may result in shrinkage (film becomes shorter). Shrinkage will always be more important in the machine direction (MD) than in the cross direction (CD).



Oven drying (screen printing) or UV drying will always to some extent reduce the moisture content of the complex. Therefore slight variations in the dimension of the sheet will occur.

If multi-colour jobs (e.g. 4 colour halftone) are printed on a 1 or 2 colour-press, we recommend:

- To pass the sheets 'blank' through the press. This will allow the material to settle down. Indeed the possible dimensional variations of the sheets occur mainly after the first colour.
- If the print job is not completed within the same day, cover up the sheets to avoid moisture exchange with the environment.