

A Guide to Humidity Control

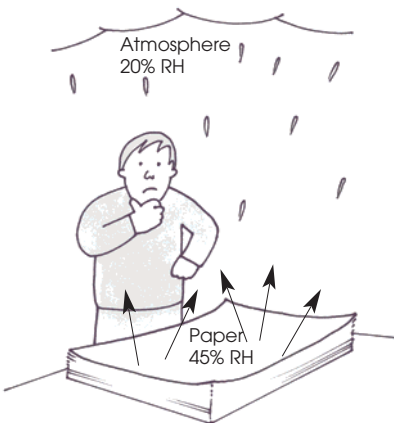
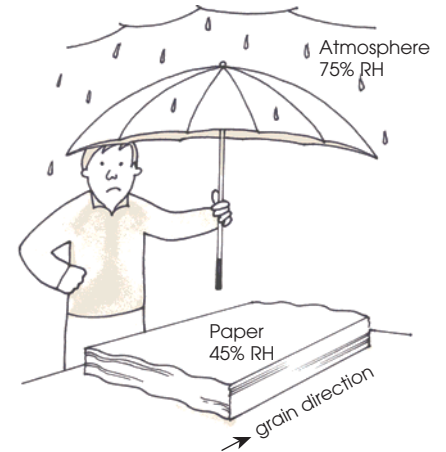
When cold material is unwrapped in a warm environment, the air immediately surrounding the stack condenses; this excess condensation is absorbed by the material very quickly and can create wavy edges.

To minimise or avoid this, ensure that the material remains moisture-proof wrapped until the temperature equilibrium is achieved.

High humidity and its effect on paper and board

Wavy edges are caused by the material absorbing excess moisture and expanding the fibres in the cross grain direction. As a rough guide, fibres expand at a ratio of 5 : 1 cross grain. This expansion creates wavy edges.

To minimise or avoid this, ensure that the material remains moisture-proof wrapped until conversion and then protected at each stage of production or conversion.



Low humidity and its effect on paper and board

What is commonly referred to as tight edges is edge shrinkage. This happens where the material gives off moisture to the atmosphere and contracts the fibres, mainly in the cross grain direction.

The figures shown here are quite common during the winter months for, as the factory temperature increases to combat freezing conditions outside, the relative humidity drops dramatically. To minimise or avoid this, introduce humidification if possible, or if the room is small, increase the relative humidity locally by buckets or cans of water or plenty of wet rags.

All paper or board when received will be packed in moisture-proof wrappers; to minimise or avoid problems ensure that the material remains wrapped until conversion and then protected at each further stage of production.

Using stack covers

The use of a Robert Horne stack cover maintains flat material.

