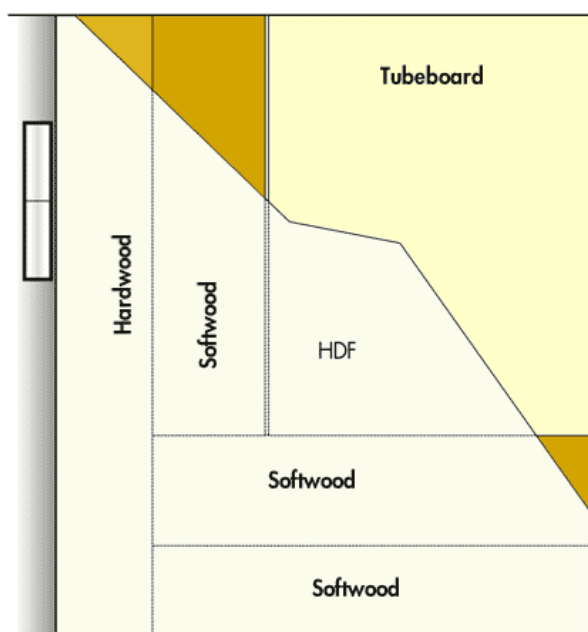
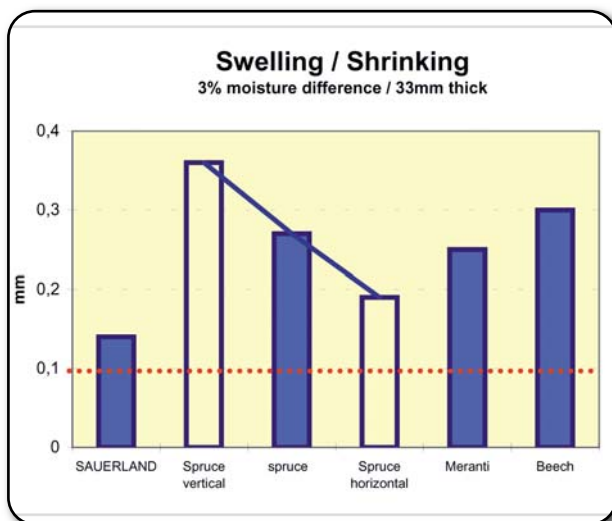


Samples

The following types of board have been tested:

- SAUERLAND stile & rail HVA-650 kg/m³
- spruce : vertical annual rings
horizontal annual rings
- meranti
- beech



Climate Test

The samples have been exposed to 80% rel. humidity until the moisture had increased by about 3 %.

Result

SAUERLAND stile & rail material

- low swelling / shrinking due to structure of 'vertical grain'.

Spruce

- great variance of swelling and shrinking
- vertical annual rings : variation twice as high as of samples with horizontal rings.

Consequence for door construction

Components within a door use to have lower moisture content than those exposed to open humidity.

This fact should especially be considered for :

- stile reinforcements
- second rails
- lock blocks

Recommendation :

All components inside the door should have a structure of 'vertical grain'.