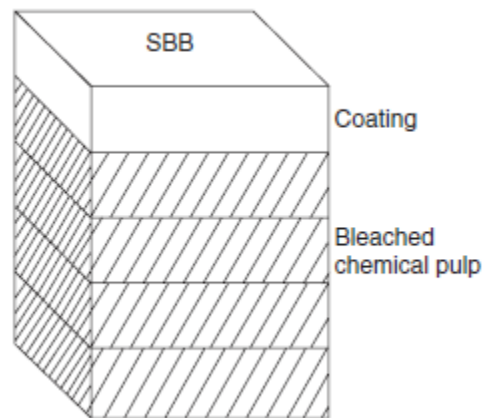


Commonly used paper boards

1. Solid bleached board (SBB)

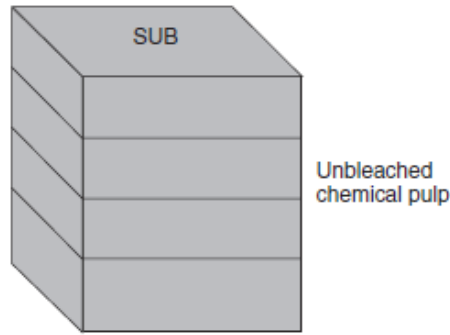
Solid bleached board is made exclusively from bleached chemical pulp (Fig. 8.6). It usually has a mineral pigment coated top surface and some grades are also coated on the back. The term SBS (solid bleached sulphate), derived from the method of pulp production, is sometimes used to describe this product. This paperboard has excellent surface and printing characteristics. It gives wide scope for innovative structural design and can be embossed, cut, creased, folded and glued with ease. This is a pure cellulose primary (virgin) paperboard with consistent purity for food product safety, making it the best choice for the packaging of aroma and flavour sensitive products. Examples of use include chocolate confectionery, frozen foods, cheese, tea, coffee, reheatable products and as a base for liquid packaging.



Construction of SBB.

Solid unbleached board (SUB)

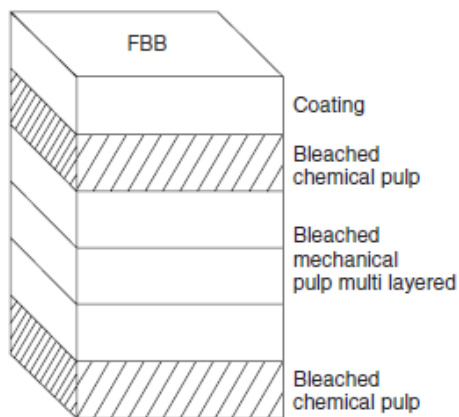
Solid unbleached board is made exclusively from unbleached chemical pulp (Fig. 8.7). The base board is brown in colour. This product is also known as solid unbleached sulphate. To achieve a white surface, it can be coated with a white mineral pigment coating, sometimes in combination with a layer of bleached white fibres under the coating. This board is used where there is a high strength requirement in terms of puncture and tear resistance and/or good wet strength is required, such as for bottle or can multipacks, and as a base for liquid packaging.



Construction of SUB

Folding boxboard (FBB)

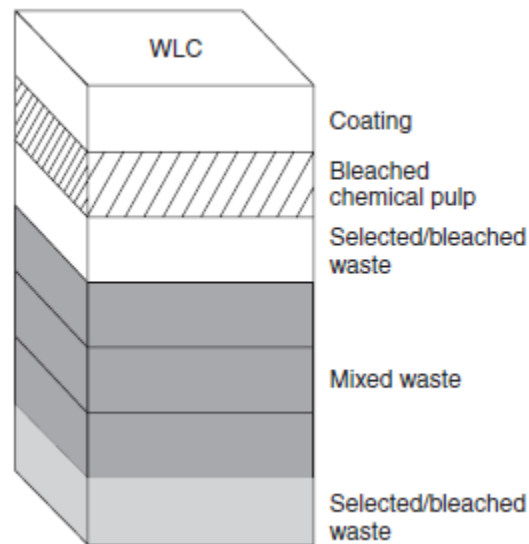
Folding boxboard comprises middle layers of mechanical pulp sandwiched between layers of bleached chemical pulp (Fig. 8.8). The top layer of bleached chemical pulp is usually coated with a white mineral pigment coating. The back is cream (manilla) in colour. This is because the back layer of bleached chemical pulp is translucent allowing the colour of the middle layers to show through. However, if the mechanical pulp in the middle layers has been given a mild chemical treatment (bleached), it is lighter in colour, and this makes the reverse side colour lighter in shade. The back layer may, however, be thicker or coated with a white mineral pigment coating, thus becoming a white back folding box board. The combination of inner layers of mechanical pulp and outer layers of bleached chemical pulp creates a board with high stiffness. Fully coated grades have a smooth surface and excellent printing characteristics. This paperboard is a primary (virgin fibre) product with consistent purity for food product safety and suitable for the packing of aroma and flavour sensitive products. It is widely used for food products, such as confectionery, frozen and chilled foods, tea, coffee, bakery products and biscuits.



Construction of FBB

White lined chipboard (WLC)

White lined chipboard comprises middle plies of recycled pulp recovered from mixed papers or carton waste. The middle layers are grey in colour. The top layer, or liner of bleached chemical pulp is usually white mineral pigment coated. The second layer, or under liner, may also comprise bleached chemical pulp or mechanical pulp. This product is also known as newsboard. The term chipboard is also used, though this name is more likely to be associated with an unlined grade, i.e. without a white, or other colour, surface liner ply (Fig. 8.9). The reverse-side outer layer usually comprises specially selected recycled pulp and is grey in colour. The external appearance may be white by the use of bleached chemical pulp and, possibly, a white mineral pigment coating. (White PE has also been used.) There are additional grades of unlined chipboard and grades with special dyed liner plies for use in the manufacture of corrugated fibreboard. The overall content of WLC varies from about 80–100% recovered fibre depending on the choice of fibre used in the various layers. WLC is widely used for cereals, dried foods, frozen and chilled foods, and confectionery outers.



Construction of WLC