

**ADHESIVE**

Substance capable of adhering one surface to another. For fiberboard boxes, the substance used to hold plies of solid fiberboard together, to hold linerboard to the tips of flutes of corrugated medium, or to hold overlapping flaps together to form the joint or to close a box.

**ANILOX SYSTEM**

Inking system used in flexographic presses.

**BAR CODE**

An identification symbol. Alpha or alphanumeric information is encoded in a sequence of high-contrast, rectangular bars and blank spaces. The relative widths of these bars and spaces and their sequence differentiate the individual characters that make up the encoded information. Bar codes are “read” by electronic scanners.

**BASIS WEIGHT**

Weight of linerboard or corrugating medium expressed in terms of pounds per 1,000 square feet (msf).

**BLEED**

To run, dilute or migrate colors into unwanted areas connected to printed areas. To print an area beyond the cut edge or score so that the design is cut off or folded under.

**BMC**

A statement printed within a border on a corrugated or solid fiberboard box guaranteeing that all applicable construction requirements of the carrier classifications have been observed and identifying the box manufacturer.

**BOX**

A rigid container having closed faces and completely enclosing its contents.

### **BOX COMPRESSION STRENGTH**

A corrugated box's resistance to uniform applied external forces.

### **BULK BIN**

Goods or cargo not in packages, boxes, bags or other containers; or goods unpackaged (loose) within a shipping container. Also, a large box used to contain a volume of product; e.g., "bulk box."

### **BURST STRENGTH/MULLEN**

The force required to rupture a linerboard or combined board, using hydraulic pressure measured by a Mullen tester, relates indirectly to the box's ability to withstand external or internal forces, and to contain the contents during rough handling. This method cannot be used on triple wall combined board and is of limited reliability on double wall, as it is difficult to force the apparatus through the multiple facings simultaneously. When using certain specifications in the carrier classifications, minimum burst strength must be certified.

### **CALIPER**

Thickness of a material usually expressed in thousandths of an inch (mils) or sometimes referred to as "points."

### **CARDBOARD**

A thin, stiff pasteboard sometimes used for playing cards or signs. Misuse has extended the laymen's definition to include boxboard (used to make folding cartons) and containerboard, a different material used to make corrugated board.

### **CARTON (FOLDING CARTON)**

A folding box made from boxboard, used for consumer quantities of product. A carton is not recognized as a shipping container.

## **CHIPBOARD**

A paperboard generally made from recycled paper stock. Uses include backing sheets for padded writing paper, partitions within boxes or chip boxes.

## **CONTAINERBOARD**

The paperboard components (linerboard, corrugating material and chipboard) used to manufacture corrugated and solid fiberboard. The raw materials used to make containerboard may be virgin cellulose fiber, recycled fiber or a combination of both.

## **CORRUGATED BOARD OR CORRUGATED FIBERBOARD**

The structure formed on a corrugator by gluing one or more sheets of fluted containerboard (medium) to one or more sheets of flat containerboard (linerboard). There are four common types:

## **CORRUGATED MEDIUM**

A sheet of corrugating material pressed into the wave shape known as flutes.

## **CORRUGATION DIRECTION**

The normal direction of flutes is parallel to the depth of the box, so that they are vertical when the box is stacked for shipment. In end-opening and wraparound box styles, the flute direction may be parallel to the length and width, resulting in a "horizontal corrugation box."

## **CORRUGATOR**

The machine that unwinds two or more continuous sheets of containerboard from rolls, presses flutes into the sheet(s) of corrugating medium, applies adhesive to the tips of the flutes and affixes the sheet(s) of linerboard to form corrugated board. The continuous sheet of board may be slit to desired widths, cut off to desired lengths and scored in one direction.

### **CURTAIN COATING**

Combined corrugated board that has been surface coated on one or both sides with a hot-melt wax blend.

### **DIE CUT**

The act of cutting raw material (such as containerboard) to a desired shape (such as a box blank) by using a die. Also used to describe the resulting box blank.

### **DIMENSIONS**

The three measurements of a box, given in the sequence of length, width and depth. Inside dimensions are used to assure proper fit around a product. Outside dimensions are used in the carrier classifications and in determining patterns.

### **ECT (EDGE CRUSH TEST)**

The amount of force needed to cause compressive failure of an on edge specimen of corrugated board. A primary factor in predicting the compression strength of a completed box. When using certain specifications in the carrier classifications, minimum edge crush values must be certified.

### **FIBERS**

Thread-like units of vegetable growth obtained from fibrous plants (cotton, jute) or trees (pulp wood). In the papermaking process, the individual, basic, thread like units developed by the pulping refining recycled paper, to make new paper.

### **FLUTES**

One of the wave shapes pressed into corrugated medium. A, B, C, E and F are common flute types, along with a variety of much larger flutes and mini-flutes.

### **FOUR-COLOR PROCESS**

Four halftone plates, using the four subtractive primary colors, create full-color images: cyan, yellow, magenta, and black.

## **F T P WEBSITE**

File Transfer Protocol is a standard network protocol used to transfer files from one host or to another host over a TCP-based network, such as the Internet.

## **G C M I**

A standard for color used in package printing developed by the Glass Packaging Institute (formerly known as the Glass Container Manufacturers Institute, hence the abbreviation).

## **JOINT (MANUFACTURER'S JOINT)**

The part of the box where the ends of the scored and slotted blank are fastened together by taping, stitching or gluing.

## **KNOCKED-DOWN (KD) OR KNOCKED-DOWN FLAT (KDF) A52**

A flat, unopened box whose manufacturer's joint has been sealed. An article that is partially or entirely taken apart for packing and shipment. A KD box may be designated as "right hand" when the longer panel appears on the right or as "left hand" when it appears on the left.

## **KRAFT**

Word of German origin meaning strength; designates pulp, paper or paperboard produced from wood fibers by the sulfate process.

## **LABEL**

A separate slip or sheet of paper affixed to a surface for identification or description.

## **LENGTH**

The larger of the two dimensions of the open face of a box as it is set up to receive product (after closing the joint).

### **LINERBOARD**

Paperboard used for the flat outer facings of combined corrugated fiberboard, and the outer plies of solid fiberboard.

### **LITHO LAMINATED**

Litho laminated labels are usually 80lb or 100lb C1S stock (sometimes it can be just a gloss text paper) that is printed and applied with adhesive to a fluted corrugated sheet before it can convert to folding carton box.

### **MASTER PACK**

Shipping containers used to over wrap or contain a number of individual containers.

### **OVERLAP**

A design feature wherein the top and/or bottom flaps of a box do not butt, but extend one over the other. The amount of overlap is measured from flap edge to flap edge.

### **PANTONE (PMS)**

Pantone Matching System (PMS), a proprietary color space used in a variety of industries, primarily printing, though sometimes in the manufacture of colored paint, fabric, plastics, corrugated and papers.

### **PARTITIONS**

A set of slotted corrugated, solid fiberboard or chipboard pieces that interlock when assembled to form a number of cells into which articles may be placed for shipment.

### **PRE-PRINT**

A roll of linerboard that has been printed and re-wound prior to the manufacture of combined board. Use requires special equipment on a corrugator to assure precise slit, score and cut-off operations.

### **RECYCLABLE**

Packaging materials that may be processed through a number of treatments or changes in order to be reused.

### **RECYCLED CONTENT**

Corrugated, paperboard and paper may contain up to 100 percent recycled fibers. Fiber may be recycled from pre-consumer sources (box plant scrap and trimmings) and/or post-consumer sources (corrugated boxes that have been used and recovered for recycling).

### **RSC**

A box style manufactured from a single sheet of corrugated board. The sheet is scored and slotted to permit folding. Flaps extending from the side and end panels form the top and bottom of the box. All flaps are the same size from the edge of the sheet to the flap score lines. The two outer flaps (normally the lengthwise flaps) are one-half the container's width so that they meet at the center of the box when the user folds them. Flute direction may be either perpendicular to the length of the sheet (usually for top-opening RSCs) or parallel to the length of the sheet (usually for end-opening RSCs).

### **SCORE**

A well-defined impression or crease in corrugated or solid fiberboard made to position and facilitate folds.

### **SLIP-SHEET**

A flat sheet of material used as a base upon which goods and materials may be assembled, stored and transported.

### **SLIT-SCORE**

A cut made in a fiberboard sheet extending through only a portion of the thickness, commonly seen as intermittent cuts on a score line. Purpose is to aide

with folding on the score line.

### **SLOT**

A wide cut, or pair of closely spaced parallel cuts including removal of a narrow strip of material, made in a fiberboard sheet, usually to form flaps and permit folding without bulges caused by the thickness of the material. Common widths are 1/4" (.635 cm) and 3/8" (.952 cm)

### **STACKING STRENGTH**

The maximum compressive load a container can bear over a given length of time, under given environmental/distribution conditions without failing.

### **UNITIZED LOAD**

A load of a number of articles or containers, bound together by means of tension strapping, plastic shrink or stretch films.

### **UNIVERSAL PRODUCT CODE (UPC)**

A 12 or 13 digit, numeric code that uniquely distinguishes products.

### **UPC (UNIVERSAL PRODUCT CODE) LABEL**

A small label usually printed in black ink on white paper, carrying a sharp image of the contents' UPC. Used instead of direct printing of bar codes when scanning equipment requires higher resolution.