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GLOSSARY OF TERMS USED IN VISUAL CARDED PACKAGING

ARTICLE DRAWING: A computer drawing provided prior to prototyping to visually show the proposed design concept.

BLACK POINTS: Contamination of plastic film used in thermoforming, with foreign matter in the form of dark particles.

BLANKET: A rubber-surfaced mat used in Offset Lithography to transfer the image from the plate to the printing surface.

BLEED: An extra amount of printed image that extends beyond the edge of the trimmed card.

BLISTER: Thermoformed semi-rigid plastic shell, generally shaped to conform to product to be packaged.

BLISTER CARD: Printed paperboard backer carrying packaged product's sales message and instructions for use. Coated on one side with specially formulated heat-seal adhesive to allow for a secure bond of blister flange to board.

BLISTER PACKAGING: A type of packaging where a product is secured between a preformed, transparent plastic dome or bubble and a paperboard surface or carrier. Attachment is usually made by heat-sealing.

BURN HOLES: Areas where heat and vacuum have created a hole in thin or weak spots of a thermoformed.

CALIPER: The thickness of paperboard (also known as point) or plastic film (also known as gauge) usually expressed in thousandths of an inch.

CLAMSHELL BLISTER: Hinged, bi-folded or tri-folded blister allowing two-sided product visibility.

CLAY COATED BOARD: A high grade of paperboard, such as solid bleach sulfate, which has been coated at the paper mill with a sizing material such as fine clay coating to fill in the pores and provide a smooth printing surface with good ink holdout.

CMYK: Cyan, Magenta, Yellow and Black are the four colors used in process printing.

COLD FORM: Caused when plastic is thermoformed under insufficient heat. If excessive, generally manifests itself during heat sealing process by flange area lifting and rippling off surface of board stock. Can be detected during thermoforming process with the use of polarized plastic sheets and a light source.

COLOR BARS: A series of solid and tinted colors printed on the edge of a master sheet that are used to measure color density.

COLOR SEPARATION: The process of separating color originals, such as a photograph or color transparency, into the primary colors used in four color process printing.

COMPRESSION: The shrinking of computer files so that the same information can be stored in less memory.

COMPUTER AIDED DESIGN (CAD): The use of computers and special software to help in all phases of the engineering design work required in the development of a thermoformed part.

COMPUTER AIDED MANUFACTURING (CAM): Manufacturing instructions are programmed on a computer to automate and control the machining of mold pieces used in thermoforming tooling.

CONTRACT PACKAGER: A firm that packages goods for others. May also process the goods in whole or part as in a fulfillment company.

COPY: Any furnished typewritten material, pictures, artwork etc. used in the production of a printed piece.

DENEST: To separate one thermoformed part, such as a blister, from the next in order to feed it into the next stage of the packaging process.

DENSITOMETER: An instrument used to measure the density of ink color printed on the substrate.

DESKTOP PUBLISHING: The process of creating fully composed artwork using a computer, software and an output device such as a laser printer.

DIGITAL PROOF: A proof produced by means of a special printer that is designed to simulate, as closely as possible, the behavior and color of a printing press. A digital proof is produced without using film; hence, sometimes called a "filmless proof."

DIE CUTTING: The cutting of finished sheets of blisters or blister cards into individual pieces using a steel rule die.

DOT GAIN: The effect in which the wet ink dots are squeezed by the printing press blanket and spread slightly resulting in darker tones or stronger colors.

DOUBLE BUMP OR DOUBLE HIT: Printing the same color, such as black, twice to achieve heavier ink coverage.

DRAFT ANGLE: The degree of taper of a blister or clamshell sidewall to facilitate removal from the thermoforming mold and denesting of the blister.

DYLUX (formerly known as a blue line): Single color, multi-hued photoprints made from production films used to check the position, correctness and placement of the copy and cropping of photos.

EMULSION SIDE: The side of photographic film coated with the silver halide emulsion.

EPS FILES: Encapsulated PostScript is an alternative picture file format supported by Adobe Systems. It allows data to be stored and edited and is easy to transfer between Macintosh and MS-DOS systems.

FIBER-TEAR: In a blister package, skin package, or paper to paper assembly, the tear opposed to separation of adhesives when the assembly is pulled apart. If the adhesive bond is weak, unit separation will occur at the paper-adhesive interface rather than the paper fiber.

FILLING IN: A condition in which halftones, tints and reverses "fill in" producing a muddy or solid appearance.

FILM STRIPPING: The positioning of or inserting copy elements in negatives (or positives) to compose a layout for plate making.

FLANGE: Generally, a projecting or flared edge from the sidewall of a thermoformed packaging product. The area of a blister that is sealed to a blister card.

FOLD-OVER BLISTER CARD: Scored blister card, with die cut opening, allowing blister to be trapped between the two halves of the card. Provides board to board and board to blister flange seal, particularly beneficial in blister packaging heavy products.

FONT: A complete set of characters and symbols in one typographic design.

FOUNTAIN SOLUTION: In offset printing, a solution of water, gum and other chemicals used to dampen the printing plate and keep non-printing areas from accepting ink.

GANG OR COMBINATION RUN: Combining of unrelated jobs from different customers on one set of printing plates in order to reduce production costs by sharing setup and running charges.

GELS: Undissolved resin in plastic film, which take the form of translucent globules.

GRAIN DIRECTION: The direction in which most fibers lie in a sheet of paperboard which corresponds with the direction the board is made on a paper machine.

GRAPHICS: The design and decoration of the exterior surfaces of a package, and the use of the photographic and printing techniques which are employed in labeling and decorating packages.

GRIPPER EDGE: The leading edge of a sheet of board, which is fed through the offset printing press.

GUIDE PINS: Retractable spring devices that maintain proper alignment between a blister and blister card in the heat sealer's fixture.

GUTTER: The blank spaces between images on a printed sheet.

HALFTONE: The reproduction of continuous-tone images, such as original artwork or photography, through a screening process which converts the image into a pattern of dots required in the printing process.

HEAT SEAL: A method of uniting two or more surfaces by heat, pressure and dwell time.

HEAT SEAL COATING: A coating applied which is capable of being activated by heat and dwell (time) to form a bond to another material such as a plastic blister to a heat seal coated blister card.

HEAT SEAL COATING WEIGHT: The amount of coating material applied to the board as expressed in weight of solids per thousand square feet of surface.

HICKIES: Defects in print appearing as specks of ink surrounded by a white halo.

IMAGESetter: A computer driven output device that produces pages of text, graphics, and images on paper or film, using electrostatic or photographic techniques.

INSERT CARD: Printed merchandising and information cards used in conjunction with clamshell, two-piece, and folded flange blisters.

KNOCK-OUT: To remove the background color on which type or graphics are being overprinted.

LASER PROOF: A non-film digital proof used to check image placement, text and proper color separation. Not designed for color matching.

LINE ART: Illustrations or copy made up of solid black or white with no screened shadings.

MAKEREADY: All the work done to set up a printing press or die cutter such as putting ink in the fountains, adjusting the feeder and grippers, mounting the printing plates, packing the steel rule die etc.

MOIRE: An undesirable optical pattern that can happen when two or more grid patterns overlap.

MOTTling: An uneven appearance in printed solids characterized by small light and dark areas.

NEGATIVE: Photographic film in which the dark areas of the images or text appear light and the light areas appear dark. Used to make printing plates.

OCR: Optical Character Reader is a device that allows a computer to read scanned printed information.

OFFSETTING: An undesirable transfer of the ink from the front of one sheet to the back of the adjacent sheet.

OFFSET LITHOGRAPHY: The printing method used to produce blister cards and skin board in which ink is transferred from the printing plate onto a rubber blanket and then under compression onto the board stock. This helps compensate for the unevenness of the board.

OVERPRINT: Printing over an area that already has been printed.

PDF: Portable Document Format is an Adobe file format that captures all the elements of a printed document as an electronic image that you can view, navigate, print or forward to someone else.

PANTONE MATCHING SYSTEM (PMS): A system of inks, color specifications, and color guides for specifying and reproducing color.

PERFORATIONS: Small pinholes sometimes made in skin board to facilitate air removal during the packaging process.

PICKING: The lifting of fragments of the paper surface or coating during the printing process.

PIGMENT: The solid particles used in inkmaking that give inks its color, body, transparency or opacity.

PLATES: The carriers of the images that are to be printed. One printing plate is required for each color printed.

PLATEMAKING: The process of creating printing plates.

PLUG ASSIST: A mechanical device used in thermoforming to aid in sheet stretching prior to its total contact with the mold. This helps provide a more uniform distribution of the sheet.

POLYVINYL CHLORIDE (PVC): A popular ridged plastic film used in thermoforming made by the polymerization of vinyl chloride.

POSTSCRIPT: A computer language created by Adobe Systems that allows a programmer to create complex pages using a series of commands.

PREFLIGHT: The operation of evaluating a supplied electronic file to determine if all of the elements necessary to print a job are included and usable.

PREPRESS: The process of preparing output for printing, such as creating film, checking color, creating proofs etc.

PRESS PROOF: Achieved by printing a small run on press under actual production conditions using board stock and ink colors as specified for the job.

PROCESS COLORS: Yellow (lemon), magenta (cold red), cyan (blue-green) and black when used in various strengths and combinations in four color process printing make it possible to reproduce thousands of different colors.

PROTOTYPE: A thermoformed representation of the proposed part formed over a wood, epoxy or machined aluminum pattern with a hand trimmed flange showing the design concept as well as the finished size.

REGISTER: The fitting of two or more printing images in exact alignment with each other. Cross hair lines or bull-eyes marks are used to determine registration.

RIP: Raster Image Processor is a device that converts the PostScript information received from a computer to an output device that transfers an image onto paper, film or plates.

STRIPPING: In prepress, the positioning of negatives on a flat to compose a layout for platemaking.

STRIPPING (SCRAPPING): The process of separating the individual die-cut blisters and blister cards from the full sheet and from each other at the end of the manufacturing process.

SCANNING: (also known as digitizing) Converting an image to a digital file that can be stored, retrieved, displayed and printed by a computer.

SCUMMING: An undesirable adhesion of ink to the non-image areas of the printing plate.

SHELF LIFE: The length of time that packaging materials can be stored under specific temperature and humidity conditions and still be suitable for use.

SKIN PACKAGING: A process whereby a product is covered by a closely fitting transparent film on one side and paperboard on the other. During sealing process a vacuum is used to draw the heated film around the product and bond it to the board. Individual packages are then die cut out.

SKIN PACKAGING BOARD: A specially designed paperboard that allows a vacuum drawn through it. Board contains repeated printed impressions of individual cards, with product sales message and instructions for use. Heat seal adhesive is applied over the printing.

SLUR: A condition caused by slippage at the moment of impression between the paper, plate or blanket.

SOLID BLEACH SULFATE (SBS): Paperboard made from virgin-bleached fibers in a single layer. SBS used in blister packaging is a special low density, high strength, high-brightness board with good rigidity.

STREAKING: Streaks or bands, which appear across the metal cylinder of the press and transfer onto the printed board.

THERMOFORMING: A process of forming thermoplastic sheeting by heating the sheet and forcing it to conform to a mold by vacuum alone (vacuum forming) or in combination with compressed air (pressure forming).

TIFF: Tagged Image File Format is a standard encoding structure for scanned image files.

TINT: A solid color that has been screened to create a lighter shade of that color.

TINTING: A uniform discoloration of the background caused by emulsification of ink pigment in the fountain solution.

TRAC PAC: Andex trade name for a two or three-sided folded flange blister. Folded flanges allow backer card to slide freely to provide reclosing feature to package.

TRAPPING: The ability of a previously printed wet ink to accept the overprint of another wet ink without bleeding into one another.

TWO PIECE BLISTER: Double blister designed to encapsulate product allowing for two-sided product visibility.

VARNISH: Clear lacquer coating used to protect or enhance color printing. Can be used when heatseal coating is not required such on insert cards

VIGNETTE: Color manipulation effect in which all or a portion of an image fades gradually away until it blends into the non-imaged area. Sometimes refers to a graduated background tone.

WASH-UP: The process of cleaning the components of a printing press including the rollers, printing plates and ink fountains after the job is complete.

WATERPROOF^ã: A color proof provided on the actual board stock specified for the job to reasonably show how the color of a printed job will look.

WEBS: Thin folds in plastic, projecting out from corners of sidewalls, near the base of thermoformed packaging products. Webs are cosmetically unappealing and physically weaken affected area of the thermoformed product.