

Packaging Guidelines

When ordering custom packaging, eight areas of information are essential for accurate quoting. Here we review each of these areas to familiarize you with the requirements and terminology.

1 Quantity Box prices will be quoted in terms of "Price Per Thousand". And it's important to note that the higher the quantity, the lower the

unit price will be. This is because the "set-up" charges - including cutting die, machine time, etc. - are spread over a larger volume, thus reducing the charge per unit.

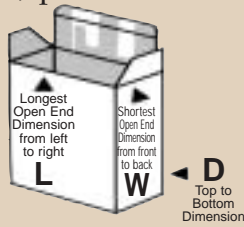
For Example:	Quantity	Cost Per M	Cost Per Piece
	5,000 (min.order)	\$481	.48
	10,000	309	.31
	25,000	178	.18
	100,000	116	.12

So you can see it will be beneficial to your customer to order as large of a quantity as feasible. Always find out your customer's

usage as it could be much more economical to order 3, 6, or 12 months' inventory at one time.

2 Size The dimensions of the box must be listed in the proper sequence - LxWxD - in order to achieve the shape intended. To determine the proper Length, Width and Depth, place the carton facing you

with the opening pointing up. Dimensions should be given to the nearest sixteenths of an inch and measured from center of score to center of score. Always refer to the outside dimensions of the carton.



Length x Width x Depth

(Longest open end dimension from left to right)

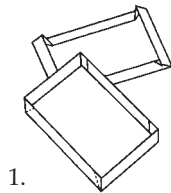
(Shortest open end dimension from front to back)

(Remaining dimension: top to bottom)

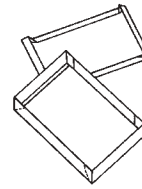
3 Style The appropriate style for a box will be determined by several factors such as:

- what the contents will be
- what the contents weigh
- how the box is to be displayed
- if the box is to be machine or hand loaded

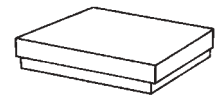
Whenever possible, send us a sample of a box being currently used. A description of the carton along with a diagram is also helpful.



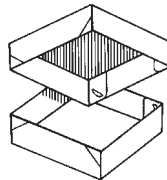
1. 2 pc. Beers



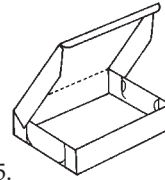
2. 2 pc. Beers-Plex with Extended End Flaps



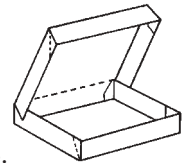
3. 2 pc. Simplex with Shallow Lid



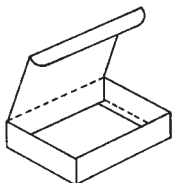
4. 2 pc. Lock Corner



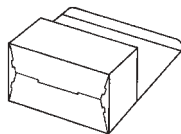
5. 1 pc. Lock Corner



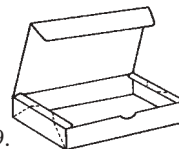
6. 1 pc. 4 Corner or 6 Corner Glued



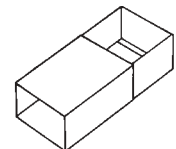
7. 1 pc. Pinch Lock



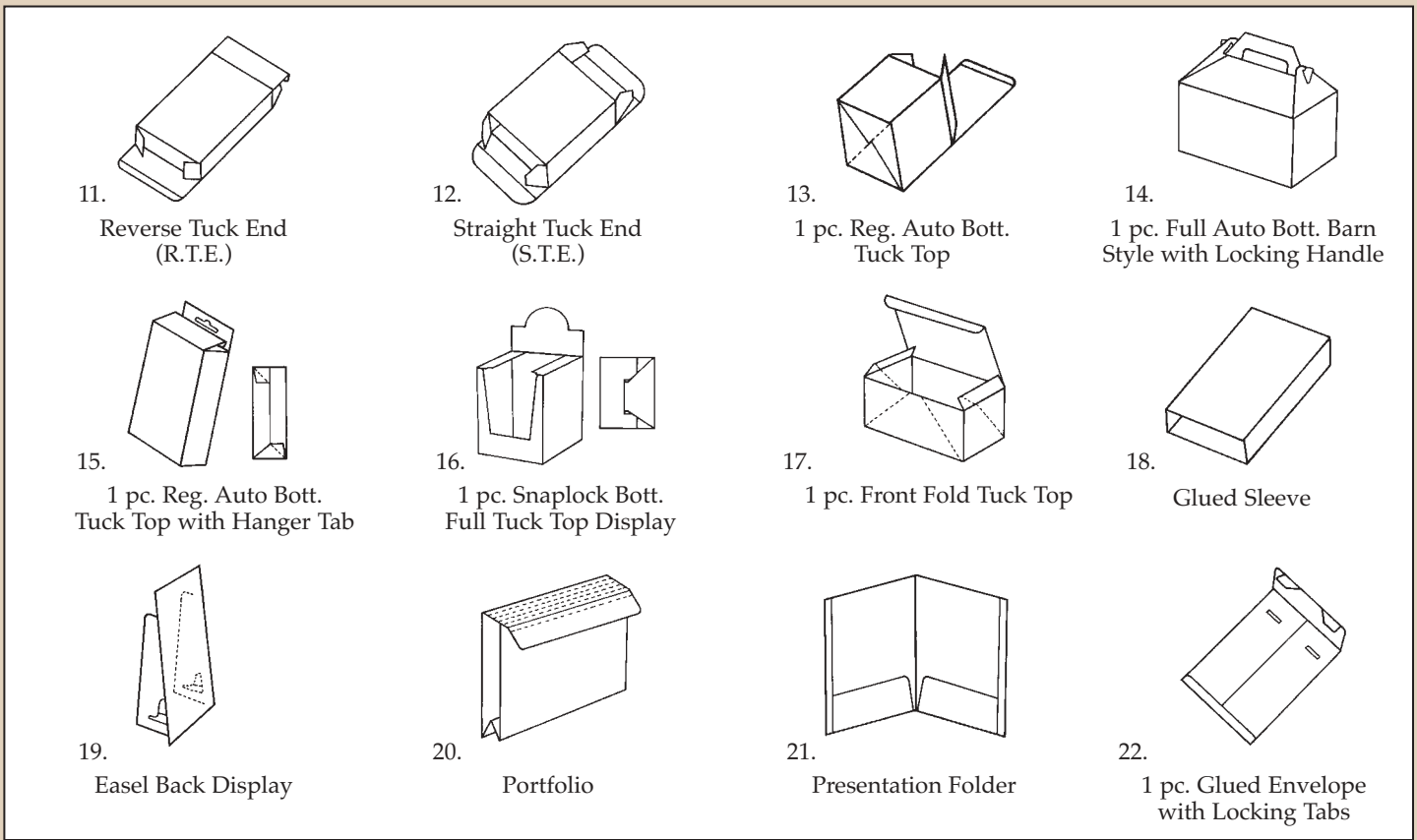
8. 1 pc. Dbl. Lock Bottom, Tuck Top (Pony)



9. 1 pc. Beers Cake



10. 2 pc. Match Box (Simplex Bottom, Glued Sleeve Top)



4 Board Type and Caliper

Type and thickness of board must be specified and should be selected based on such considerations as:

- the color needs for the interior as well as the exterior
- the printing application to be used
- the carton strength required

TYPE OF BOARD	DESCRIPTION	USES
Solid Bleached Sulphate (SBS) Virgin Board	A high quality board, white throughout. Available coated 1 or 2 sides. Provides a "bright white" background.	High-end packaging requiring high quality, graphics. cleanlook, bright white interior.
Clay Coated Whiteback (WCCWB) Recycled Board	Smooth white top, white to off-white back. Good printability.	Packaging requiring slightly less strength, with attractive interior and good print quality.
Clay Coated Newsback (WCCNB) Recycled Board	Smooth white top, gray to brown back. Good printability.	Packaging where quality print is needed, interior color is not an issue.
Clay Coated Kraftback (SUS) Virgin Board	Smooth white top, smooth brown back. Excellent strength & stiffness properties. Offers a clean brown back with no mottling effect.	Packaging for heavier products where strength as well as printability are needed. Interior color is an issue.
Clay Coated Kraftback (WCCKB) Recycled Board	Smooth white top, brown back. This recycled sheet does not offer the clean brown back that SUS offers.	Packaging for heavier products where strength as well as printability are needed. Interior color is not an issue.
Solid Kraft Virgin Board	Smooth brown top, brown back. Very strong board.	Packaging requiring extra strength as well as printability.
Bending Chip (BC) Recycled Board	Brown top, brown back. This board has a coarser printing surface.	Packaging that does not require a lot of strength or high print clarity.

Thickness of Board Boards for custom boxes will vary in thickness. A micrometer should be used to measure the thickness (caliper) of the board in thousandths of an inch. If a micrometer is not available, send us a sample of the board

needed. If you're not sure of the caliper and don't have a sample, supply us with a description of what will be packaged in the box (as well as the weight). We can make valuable suggestions for the board weight most appropriate for specific types of products.

5 Printing

We will need to know the type of printing desired or necessitated by your customer's design.

The printing methods available are:

OFFSET (Lithography) - Produces very high quality, close register printing. Offset printing is used when multi-color or excessive ink coverage is involved. This process – which utilizes a thin metal plate - is more expensive than flexo but offers a much higher quality print.

COLOR COATING (Tint) - A Web or continuous printing process used for flood or 100% coating of entire box surface. Additional printing may be applied on top of the tint color. (Note that when a light color is printed on top of a darker color, the darker color will affect the shade of the lighter ink). There is no plate cost involved in color coating.

HOT STAMP A heat process where the copy is produced by stamping a film/foil material that will adhere to the carton. The stamped copy is actually debossed into the boxboard. The hot stamp film/foil is available in many colors and is a good choice when using a tinted box, as the color of film/foil will not be affected when applied directly on top of another color. This process requires relatively inexpensive plates of brass or magnesium.

FOIL EMBOSS A process which is actually just the opposite of hot stamping, the logo is embossed (raised) and has a film/foil applied. The process requires two matched plates which are more costly than hot stamp dies.

BLIND EMBOSS A process selected when a subtle look is desired. The logo is embossed (raised) directly on the board and achieved without using any color of ink or foil. Matched metal plates are required.

VARNISH A gloss, satin or matte varnish can be applied. The varnish can be used to achieve a particular visual look or may be applied to control friction that may cause ink rub.

CONSIDERATIONS:

- Percentage of ink coverage (each color).
- Location of copy (top, bottom, panels, etc.)
- Special ink colors (It is best to supply us with a PMS number.)
- Furnish a sample when possible.

6 Prep and Plate

Your customer may provide us with digital art or film. We will supply your customer with a die drawing to correctly position their graphics. Please specify if a hard copy of the carton template is needed or if it should be supplied on disk (or modemed to the designer).

If supplying digital art, refer to our specification page for acceptable media and

software. If your customer prefers to provide film negatives (right reading emulsion side down), refer to our film specification page in order to avoid the possibility of additional charges for reworking.

A proof will be submitted for customer approval on all new orders and repeat orders with copy changes.

Prep and plate changes will be estimated along with the job quotation.

St. Joseph Packaging Electronic Art File Specifications

All files must have a stat (hard copy print-out) furnished with disc.

All electronic art files emailed must include a PDF file.

All files must be built to a die (template), furnished by St. Joseph Packaging.

Files should be created in one of the following Macintosh applications:

1. QuarkXpress 5
2. Adobe Illustrator 8, 9 or 10
3. Aldus Freehand 10.0
4. Adobe Photoshop 7
5. Art Pro 3.60

Types of Macintosh removable media we accept:

1. 800k & 1.44mb 3.5" floppy disk
2. CD-ROM
3. 100mb Zip disk

Macintosh files are preferred but if IBM PC must be used, they should adhere to the following:

1. Create files in QuarkXpress, Illustrator, or Freehand.
2. PC fonts should be included.

Types of IBM PC removable media we can accept:

1. 88k & 1.3 gb 3.5" floppy disk
2. CD ROM

General Specifications

1. Supply color printout actual size. If colors in file are not correct, mark correct color breakdown (screens of CMYK or PMS color) on print out. Specify if four color process or matched colors are to be used.
2. Include all bleeds.
3. Include all fonts & artwork placed in file.
4. Update File
5. DO NOT build trap.
6. Create outlines for all type included in eps files (be sure to furnish copy of font in case changes are required).
7. High resolution images should be in CMYK.
8. Check fit of elements that butt together by magnifying to look for gaps between elements to avoid leakers.
9. Scan 4-color images 300DPI & line work at 1200DPI, or use Streamline to outline and fill.
10. List any information unique to the job.
11. Build colors correctly in the file-PMS spot colors should be built as a spot color, PMS made of screens should be built as process colors in file.
12. DO NOT embed placed files, if necessary elements should be accessible.
13. Freehand EPS files-when making eps files from Freehand version 5.0 or higher, make sure to check the box "include document in eps". On versions before 5.0, send the original Freehand file as well as placed images. Quark EPS files should include the original Quark file as well as the placed image.
14. Proofread carefully for typographical errors.
15. Refrain from using the horizontal/vertical flip in Quark. If the element needs to be flipped, do so in the application that it was created. If it is a low resolution scan provided by us, do not flip. Instead, indicate on the file or on the printed proof you furnish.
16. Uncompressed files are preferable, but if it must be compressed, make sure to compress as a self-extracting archive. If LZW compression on a Photoshop image, please note to our attention.
17. Furnish Photoshop layered file if Photoshop files are used.
18. If UPC codes are not live in file, place FPO on code.

St. Joseph Packaging Furnished Films Specifications

Film Requirements

1. Right Reading Hard Dot Negatives
2. **Emulsion** Down
3. .004 or Heavier
4. One film per color w/ color indicated on film
5. All films must have register marks.
6. All films must be opaqued, free of dust, specs & pinholes.
7. Films must extend 2" beyond the live area.
8. A screen of 40% cyan should be behind all solid black areas.
9. **UCR** should be used in process pictorials.
10. **Highlight** a minimum of 2%, **shadow tone** a maximum of 95%
11. **Color density** not to exceed 280% in any area.
12. 150 **Line Screen** (133 acceptable)
13. The **Dmin** not greater than .05 and **Dmax** no less than 3.5
14. 5000th **Trap** to obtain overlay
15. **Do not** allow for dot gain on press.
16. **Sequence of colors** should be Black, Cyan, Magenta, Yellow
17. **Color Densities** – Black 180, Cyan 140, Magenta 150, Yellow 105

Dielines

1. A dieline will be supplied by the graphics production dept by request. This can be provided in hard copy or electronically on disc.
2. All copy must be a minimum of 1/8" from scores and knives.
3. Bleed should be 1/8" past knives – 3/32" onto glue flap. Bleeds can be indicated on blueline furnished to you.

Prepress Proofs

1. Kodak Approval or Dupont Waterproofs
2. Proof must be pulled from actual set of films supplied.
3. An original DuPont Corn Guide (Dupont Brunner scales) should appear on face of chromalins or waterproof.
4. Color Blocks should appear on dust flaps adjacent to process.

UPCs

1. Normal size
2. .003 bar width reduction
3. In order to be scannable, symbols must print black, dark blue, dark brown or cyan on a white or very light background.
4. UPC's must have FPO indicated on film if code is not live.

7 Shipping and Freight

FOB MILL: There is no freight cost included in the carton price. Shipment will be sent "Collect" with the "Ship To" receiving the freight bill or we can ship "Prepay & Charge" on the invoice for the cartons.

FREIGHT ALLOWED: When a delivered price is requested but the exact quantity of the shipment is not known we will quote a delivered price based on a certain freight rate which is stated on the quotation. Example: FOB Dallas, TX w/freight allowed at \$6.00/CWT. If at the time of shipment the actual freight charge exceeds this we will charge the additional or if it is less we will show a credit adjustment on the invoice.

THIRD PARTY BILLING: There is no freight cost included in the carton price. Shipment will be sent "Collect" with a designated third party receiving the freight bill.

PREPAID: All freight charges are included in the carton price. Shipment will be sent "prepaid" with no additional freight charges to the customer. In order to quote a prepaid price we must know the exact quantity to be shipped and the destination (city, state, zip code).

And alert us to special requirements your customer may have such as:

- Shipping to multiple destinations.
- Special case packs.
- Special pallet size requirements, including height.

8 Contract / Warehousing

When quoting a contract that will be warehoused, we will need to know:

- Total quantity to be ordered.
- Length of time product is to be warehoused (out-date).
- Date of first release.
- Quantity to ship per release if delivered price is requested.



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