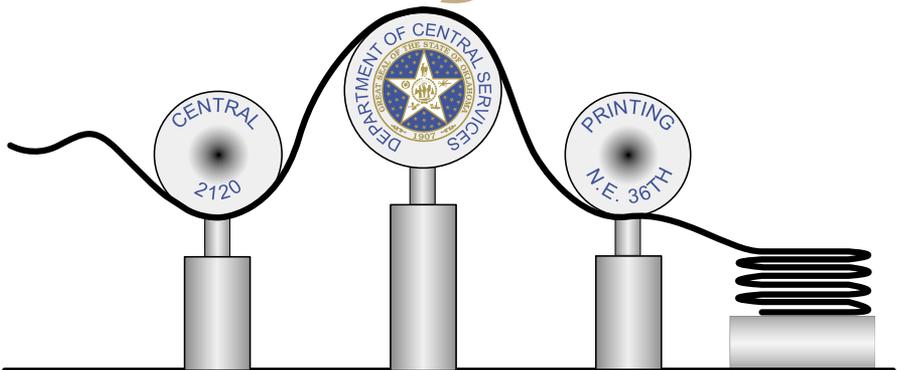




Department of Central Services

Central PRINTING

The Guide



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State of Oklahoma
Department of Central Services

Dear User:

In 1968 Central Printing was created and placed under the Office of Public Affairs. Legislation was passed whereby Central Printing could serve other state agencies and governmental entities.

Central Printing has grown tremendously since 1968; we now produce top quality products from forms to multi-color printing. We also provide high resolution printing, typesetting and assistance to customers in designing brochures, newsletters, books, and business cards. We produce almost every printing need for our customers in-house, from layout to mailing the finished product.

Central Printing, a division of the Department of Central Services, does not receive any appropriated state funds. Revenue is derived solely from the services it renders to user agencies, departments and other governmental entities. As a result, Central Printing must be cost-effective in utilizing each state printing dollar.

We serve more than half of all state agencies, providing services that include the printing of letterheads, envelopes, business cards and publications such as budget reports, annual reports, rosters, legal rules, regulation manuals, advertising materials, newsletters and carbonless forms.

This guide to cost-effective printing has been developed as a service to all governmental entities that use Central Printing. Our collective mission is to become more efficient in the use of printed material, particularly as we face cut-backs and greater demands for services.

Sincerely,
Staff of
Department of Central Services,
Central Printing Division

Compiled and printed by
State of Oklahoma
Department of Central Services
Central Printing Division

October 2002

Grateful acknowledgment is extended to the Central Printing production staff for the special efforts made to make this book possible. Without the help of a totally supportive staff of professional people, this manual could never have been prepared. Thanks also to the State of Idaho and the State of Georgia for the input they provided.

Front Cover: Central Printing sign, designed by James M. Williams,
Department of Central Services, Construction and Properties Division

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This publication was printed by Central Printing, as authorized by Pamela M. Warren, Director of Department of Central Services. Copies have been deposited with the Publications Clearinghouse of the Oklahoma Department of Libraries.

INTRODUCTION

Printed matter serves people well in many ways. Printing is a broadly humanizing phenomenon. It can educate, inform, persuade and beautify. Above all, it is a means of communication - an extension of human intellect.



Printing within the realm of State Government needs to be a cost-effective and timely process. This can be done more effectively if the person in the user agency who is called upon to produce a piece of printed matter is better informed of printing procedures.

This manual was designed with that person in mind. Each step of the printing process, such as planning, design, and actual production is discussed and illustrated where possible.

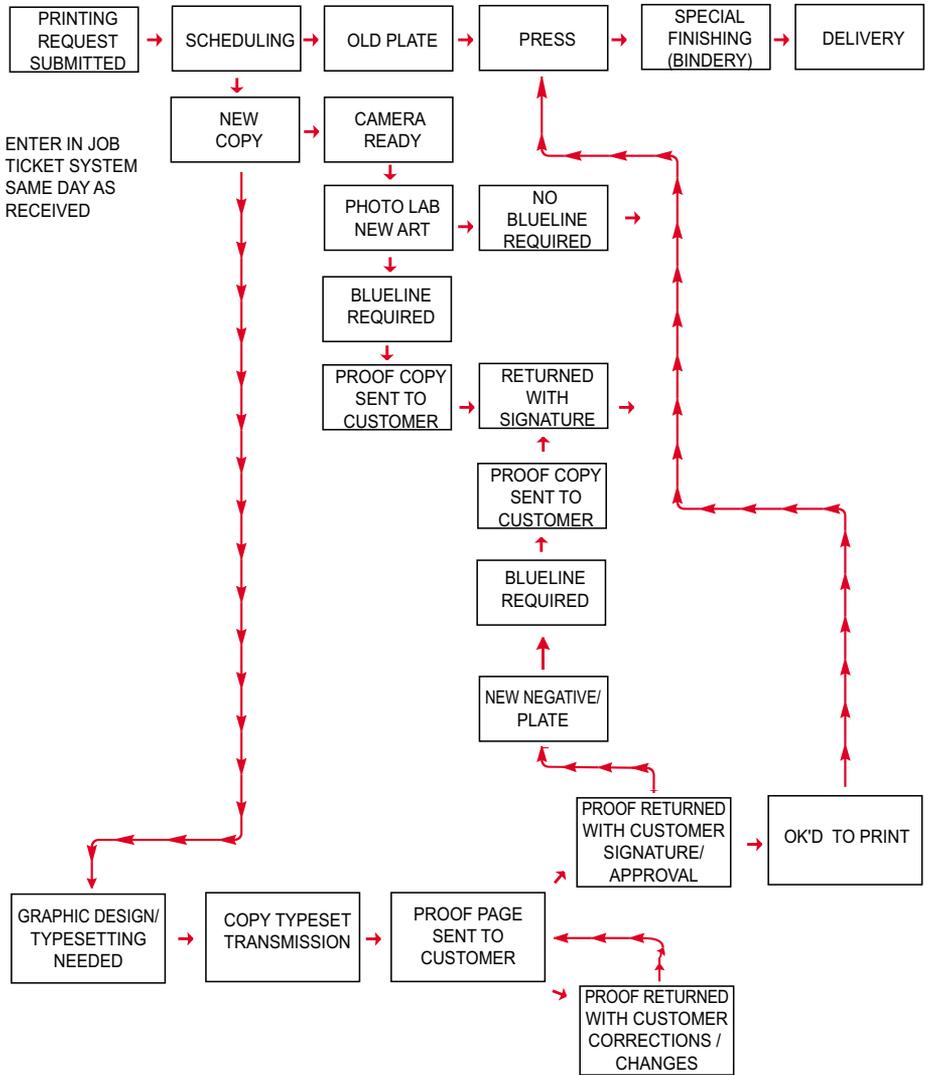
Central Printing sincerely hopes this manual will increase the user agencies' knowledge of the printing process, which will result in better communication and reduction of printing costs.



CENTRAL PRINTING

Mission: To provide high-quality printing services professionally, economically and conveniently to state agencies and governmental entities.

CENTRAL PRINTING'S WORK FLOWCHART



FACTORS AFFECTING YOUR PROJECT

I. PLANNING & PREPARATION: PRE-SUBMISSION OF COPY

A. PLAN AHEAD



“Haste Makes Waste” was never more true than in the printing business.

Rush jobs, while sometimes necessary, place a high demand on rescheduling and may incur a surcharge. Under pressure to hurry a job through, the requesting party and the printer can make mistakes due to lack of planning. Try to anticipate your needs as far in advance of delivery as possible and avoid the “costly” rush job. (Please see Appendix “B” for information on the customs of the printing trade.)

On an everyday basis, Central Printing plans for a minimum of 10 to 14 working days for completion of an ordinary order. For simple reprints, timing starts when the order is entered as a Job Ticket. For an item requiring changes or an “Approval to Print”, timing begins when the FINAL “Approval” is received at Central Printing.

To produce Rush Jobs in our Print Shop, we must set aside other scheduled work, causing delay and inconvenience to agencies who have pre-planned their work. **Please do not mark your job ASAP, as all work is scheduled on an “as soon as possible” basis. If you have a deadline date, list this date.**



“You want it when?”

IMPORTANT NOTICE!!!

There is a four-week period from January 1 to February 1 when the Print Shop is committed to printing the Executive and Legislative Budget books and their support documents. Any work in the shop may be set aside and no requests will be given priority over this budgetary printing.

Agencies need to plan their annual reports, special reports, newsletters, and forms printing so that these can be completed before this period. Any orders received after January 1 will be printed as soon as possible. Rush jobs must be brought to our attention and the due date agreed to by Central Printing. While orders will continue to flow through production during this period (in between the budgetary printing), we cannot be held responsible for meeting deadlines not specifically scheduled in advance.

STAGING:

Design, layouts, choices of paper and ink, estimates

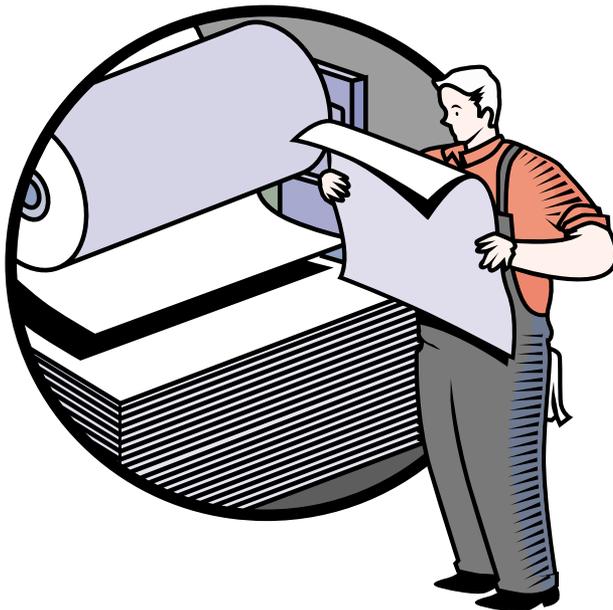
Preparing Your Specifications: It is very important to make decisions regarding the printing of a publication before it is submitted to Central Printing. Our office personnel are available to assist you once you have a fundamental idea of what you want. Learning the various types of paper, cashing in on assets such as texture and color, working within the limits of coatings and weights, and using the right ink: all these contribute to your successful, cost-effective design.

Try to provide this basic information about your publication:

1. You should have an idea about the approximate size of the printed page of your job. It may be economical to change your suggested size slightly (because of the sheet size needed by the press to be used), but it will help to know the size you prefer.
2. You should know what kind of paper (text) and cover you desire. Samples of text and cover stock are available in sample booklets for you to choose from at our office.
3. Don't let the number of copies remain a mystery until you are ready to go to press. Paper must be ordered and plans made, based on the quantity you wish. Decide in advance! Requesting an estimate from Central Printing may help with this. (See also "Standard Quantities" on [page 7](#).)
4. If you have a job requiring colored inks, use the Pantone Matching System chart for the desired color. We have a PMS chart available at our office for you to choose from. Remember that extra color means an extra press run and extra expense! However, screens can be used to achieve similar effects.



5. If you have illustrations, clip art or photographs, bring them along. Use originals that are clear and sharp.
6. If you cannot estimate the number of pages or amount of body copy accurately, be sure to bring the manuscript with you when you consult with us. It is important to know the size of the job.
7. Pre-plan the design of your job or publication. Graphic design may look easy but actually it is very difficult. Our Graphic Design personnel will design or assist you in designing your publication.
8. You should have some idea of the style of binding you want.
9. Try to anticipate your needs as far in advance as possible. As a rule, Central Printing requires a minimum of 10 to 14 working days for ordinary jobs. Rush jobs, while sometimes necessary, disrupt Central Printing's production schedule and create extra cost.
10. If your agency received an estimate before submitting your job for printing, please include the price quoted with your order. This enables Central Printing to assure the final price is as quoted or is as close to the estimated cost as possible.



SCHEDULING

Considering the following factors can often prevent errors and poor working relationships in getting your request filled in a timely manner.

- 1.** Is all material complete and accurate before it goes to the printer? Changes during production can affect your delivery date and incur extra charges.
- 2.** Are there special effects required? These add production time to your order.
- 3.** Is the quantity enough to last? Small orders run faster; however, repeated orders require additional set-up fees.
- 4.** Is the quantity too large for the deadline requested? Are “partials” of the amount acceptable until the job is complete?
- 5.** How many production stages are required to give you the finished product?
- 6.** Each step adds time to your delivery. (Example: jobs requiring typesetting, printing, collating and stitching take longer to produce than jobs which are printed and wrapped only.)
- 7.** Is your deadline critical to your operation? Have you conveyed that to the Print Shop staff?
- 8.** Are you requesting a standard stock item? Specialty papers or custom envelopes can take as long as 30 days to procure.
- 9.** Will all the work be completed in-house or does it require outside labor? (Example: foil stamping is not done at Central Printing.)
- 10.** The length of time your agency delays the “Approval to Print” of the typesetting proof or blueline can slow down your job.

See also Appendix B.

STANDARD QUANTITIES

Please try to reference the information listed below when placing your orders. In general, you should order the actual amount you need, rather than just “by the box”. Using the information below will help your agency and Central Printing when ordering.

Business cards: 250 = ½ box (minimum order); 500 = 1 box; 1,000 = 2 boxes

Stationery Envelopes:

All ordinary stationery envelopes (#9 & #10 size) come in 2,500 per case. There is a minimum-order amount of **500**, as small boxes within a case will not be “broken”.

Large Format Envelopes:

There are two basic types of large format envelopes: catalogs and booklets. Catalog envelopes are normally brown kraft or white in color and open along the right edge. Booklet envelopes are normally white in color with a gum flap closure along the top edge. There is a minimum-order amount of **500**.

Size:

6 x 9

6.5 x 9.5

7 x 10

9 x 12

9.5 x 12.5

10 x 13

10 x 15

12 x 15.5

Closure for envelopes:

gum flap

self seal or latex

clasp

Special-order Envelopes:

These are sold in a minimum amount of either 5,000 or 20,000, depending on the extent of the customization the manufacturer must build into your envelopes.

Letterheads:

Stationery is available at 500 per ream (the minimum order); a case contains 5,000 sheets.

(All orders are wrapped in plastic at 500 sheets per package, unless specified differently when ordering.)

ESTIMATING COSTS

With tight budget constraints, it may sometimes be necessary to have an estimate of your job before it is typeset or printed. Our office personnel are able to give you an approximate cost once they work with you on the specifications. Giving estimates of any complexity without viewing the material first is discouraged, since it is virtually impossible to give an accurate quote. Even for a simple one-page faxed sample, we would need exact descriptions of the texture, color, and size of the paper or envelope, the color(s) of ink, any specialty treatment such as foiling, embossing or die-cuts, and all other relevant information. This also applies to job orders.

Central Printing's typesetting services are not priced "by the line," but done "by the job."

Neither our estimates nor pricing is figured "per piece," but "by the job."

If your agency is given an estimate number, please be sure to include it and/or the price quoted when submitting your job for printing. Please remember that the estimated prices are guaranteed for 30 days only.

STATUS CHECKS

Each printing request received by Central Printing is assigned a job ticket number. The Job Ticket is then forwarded to the proper department. The Shop Supervisor makes daily checks of all work in progress, and on request, we can usually notify you by the next day of the progress of your printing.

Contact the front desk first with any concerns about a job: initiating one, finding out costs, checking a job's status, or questioning a difficulty.

If for unforeseen reasons the delivery date cannot be met, we will call

you in advance to make other arrangements. Central Printing will always do whatever is necessary to meet your agency's needs on jobs that are urgent or of a critical nature.

B. FACTORS AFFECTING YOUR DESIGN: SELECTION OF PAPER AND INKS

PAPER: Facts You Should Know

Many factors must be considered in the selection of an appropriate stock for your document. Is the material to have any aesthetic value? Will special treatments be required, such as folding or padding? What is the intended use of the document, and what degree of longevity is required? Is the desired stock readily available, or must it be ordered? Is a lighter weight paper more suitable to reduce mailing costs? For what type of press is the job best suited, and can the desired stock be used on that type of press? Central Printing will discuss these and other important questions with you to help determine the best and most economical stock for your needs.

Weight vs. Opacity: Paper is described in terms of weight: 60# stock, 80# stock and so on. This refers to the weight of a ream of that particular stock in its uncut size. **Weight** can be a plus or a minus factor in paper choice. As with textures or coating, the design and its purpose dictate the weight of the paper for the project. Pieces that will be perforated or scored require more weight than those that will not. **Opacity** is a paper characteristic apart from weight. It refers to how much light penetrates the stock, or how sheer it is. This is an important factor when the sheet will be printed on both sides. Though the paper may be a relatively light bond or offset, the sheet must be sufficiently opaque to make both sides readable. The trick is to choose no more weight than the design demands. Choosing a paper that is too heavy is an expensive mistake. You pay for the extra weight of the paper and could pay again for increased mailing and/or shipping costs. Mailing pieces in particular must be heavy enough to withstand the rigors of the mail but not so heavy that they incur exorbitant postage costs.

Even more savings are possible by considering the price differences in

the “finish” of the paper. One example is the use of 20# sulphite, 50# or 60# white “offset” finish instead of a “glossy” or “text” paper. This would be more economical and your job would have a quicker turnaround time.

The following list is only a small sampling of the hundreds of different types of paper available. We will be happy to help if you need a special paper for a specific job.

Standard divisions: Papers are generally defined in terms of their use. The usual divisions are: sulphite, bond, text, coated, offset, cover, index, carbonless (NCR), and recycled.

#1 or #4 Sulphite: This paper is commonly used for business forms. It is available in white and standard colors.

Bond 25% cotton content: This paper is most commonly used for letterheads. It is designed to accept ink readily from a pen, typewriter, or printer and is erasable.

Text: Designed for interesting textures and colors, these papers are used for booklets, announcements, brochures, etc. and are ideally suited for offset lithography.

Coated: Designed for offset printing, this paper is coated to resist the moisture level of offset printing. It is ideal for color printing and photos.

Cover: Developed for durability and dimensional stability, these are sometimes just heavier weights of text and coated stock in matching colors.

Index: An inexpensive stiff paper, it is receptive to ink and can be obtained in smooth or antique finish.

Carbonless (NCR): For multiple copies of forms; no carbon paper required; comes as “sets”. You can save your agency money and time by accepting the standard NCR color sequences. As carbonless papers are difficult to collate, paper houses now sell this product pre-collated in a set sequence of colors, as follows:

2-part forms: white, canary

3-part forms: white, canary, pink

4-part forms: white, canary, pink, goldenrod

5-part forms: white, green, canary, pink, goldenrod

6-part forms: white, blue, green, canary, pink, goldenrod

Changing your present color sequence of forms to those above may present a brief period of adjustment for your staff, but will result in a quicker turnaround time and cost savings.

Another method of saving money with multiple-copy forms is to reduce plate changes. Printing the entire “routing” code on all sheets eliminates the press changes of separate plates for each copy. For example, use a single line (usually at the bottom of the page) on all sheets as follows: “White - Customer, Canary - Central Printing, Pink - File, Goldenrod - Shipping,” etc. As plates are quite expensive and press time is one of our highest-cost items, this minor change could help reduce your costs significantly.

Recycled Papers: This paper is available in a wide variety of weights and colors. The average recycled paper is 50% recycled & 10-15% post-consumer waste.



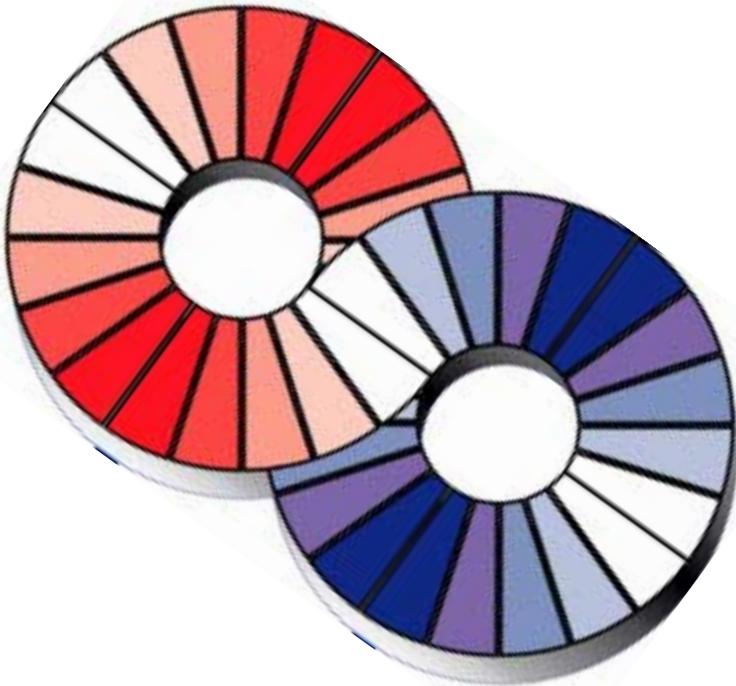
Central Printing is committed to providing high-quality printing with the use of recycled paper. In order to do this, we have replaced all our non-recycled copy paper with recycled copy paper. Orders for stationery, business cards, standard sequence carbonless (NCR) forms and copies of forms are being printed on recycled paper. Should the use of recycled paper not meet with your approval, please state so on your order. Otherwise recycled paper will be utilized.

INK SELECTION

Central Printing uses the Pantone Matching System for color coordination of inks; we have color samples available for view. Central Printing uses environmentally-safe soybean ink in all PMS colors.

If you are designing in a graphics program, please note the colors as specified by your application. They often will be the PMS color-number or equivalent, and this could be useful information for Central Printing.

Bear in mind that the more colors you intend to have printed, the more expensive and time-consuming your project will be.



STATE PRINTING STANDARDS

Restrictions on printing are minimal, allowing any agency considerable freedom in design and layout. Those guidelines that do exist are based on good sense, environmental, and cost-saving factors.

Statewide Graphics Standards:

1. Letterheads and envelopes (Minimum order of 500 for either of these)

Design: At the agency's discretion. However, we suggest that whenever possible do not use personal names and titles. Keep the design functional by using only the agency title, location, telephone and fax numbers, Internet address, etc. Every name or title change requires the expense of typesetting, new negatives and plates, and reprinting.

Stock: The standard letterhead is printed on 25% cotton recycled white bond. (A lesser-cost 20# white bond is available.)

Ink: The graphic standard letterhead is printed in PMS 280 (blue) soybean ink with a four-color state seal. **(PLEASE NOTE that the four-color state seal is available in only one position on both letterheads and business cards.)** Envelopes are printed in all PMS 280 (blue) to match. However, agencies may choose any color(s) for letterheads, envelopes, labels, etc. If you do use any color(s) other than the standard, you **MUST** include a printed sample from a past order with any further orders so that the ink(s) can be matched. You may also specify PMS colors if you have no sample.

2. Business cards (Minimum order of 250)

Design: At the agency's discretion. However, we offer the choice of the statewide graphics standard business card, with the four-color seal. (See NOTE above.)

Stock: 80# recycled Vellum-finish. Agencies may choose from a variety of other stocks available.

You must include a printed sample if possible, to assure a match of the

ink, paper, and design. It should be stapled or taped to a piece of paper.

Graphic standard business cards are printed in PMS 280 (blue) with the four-color state seal. However, agencies may use any color(s) of ink.

All information to be printed on the business cards **MUST** be included when ordering, to help expedite your order. Keep the information brief to enhance cards' readability.

All business cards are standard size, at 3 ½ x 2. Orders are filled in lots of 250, 500, 1,000, 1,500 and 2,000.

COST STATEMENTS

It is your responsibility to check whether your agency is required to place a cost statement in any publication; you will need to furnish this disclaimer. You must also keep it updated, any time there is a change to the number of copies printed and/or to the cost involved.

DOCUMENTS WHICH ARE ILLEGAL TO COPY:

Congress, by statute, has forbidden the copying of the following subjects under certain circumstances. Penalties of fines or imprisonment may be imposed on those guilty of making such copies.

Obligations or Securities of the United States Government, such as:

Certificates of Indebtedness; United States Bonds; Federal Reserve Notes; Fraction Notes; National Bank Currency; Treasury Notes; Silver Certificates; Gold Certificates; Certificates of Deposit; Coupons from Bonds; and Paper Money.

Bonds and obligations of certain agencies of the Government such as FHA, etc.

Bonds. (U.S. Savings Bonds may be photographed only for publicity purposes in connection with the campaign for the sale of such bonds.)

Internal Revenue Stamps. (When necessary to copy a legal document on which there is a canceled revenue stamp, the reproduction of the document must be for lawful purposes.)

Postage Stamps: canceled or uncanceled. (For philatelic purposes, Postage Stamps may be photographed, provided that the reproduction is in black and white and is less than $\frac{3}{4}$ or more than $1\frac{1}{2}$ times the linear dimensions of the original.)

Postal Money Orders, Bills, Checks, or Drafts for money drawn by or upon authorized offices of the United States.

Stamps and other representatives of value, of whatever denomination, which have been or may be issued under any Act of Congress.

Adjusted Compensation Certificates for Veterans of the World Wars.

Obligations or Securities of any foreign Government, Bank, or Corporation.

Certificates of Citizenship or Naturalization. (Foreign Naturalization Certificates may be photographed.)

Passports. (Foreign passports may be photographed.)

Immigration Papers.

Draft Registration Cards.

Selective Service Induction Papers which bear any of the following information: Registrant's earnings, income or previous military service.

Exceptions which may be photographed: U.S. Army and Navy discharge certificates, the Registrant's dependency status, physical or mental condition, and Court Record.

Badges, Identification Cards, Passes or Insignia carried by Military or Naval personnel or by members of the various Federal Departments and Bureaus, such as FBI, Treasury, etc. (unless photograph is ordered by the head of such department or bureau).

Copying the following is also prohibited in certain states: **Automobile Licenses, Driver's Licenses, Automobile Certificates of Title.**

Copyrighted material of any kind without permission of the copyright owner.

(The above list is not all-inclusive, and no liability is assumed for its completeness or accuracy. In case of doubt, consult your attorney.)

COPYRIGHTED MATERIAL

It is your responsibility to check concerning the use of copyrighted materials. In most cases, you must supply a copy of the written permission to Central Printing in order to reprint the item(s).

Due to legal liability, Central Printing will not reproduce copyrighted materials unless these requirements are met.



POSTAL MAILING AS IT AFFECTS YOUR PRINTING:

The cost of First Class and other classes of mail has gone up again, and since more than half of all printed matter moves through the mail at one point, this means higher costs to our customers. Central Printing is concerned about helping our user agencies cope with rising mailing costs and meeting the technical requirements the U.S. Postal Service has mandated to insure expedient, cost-effective service.

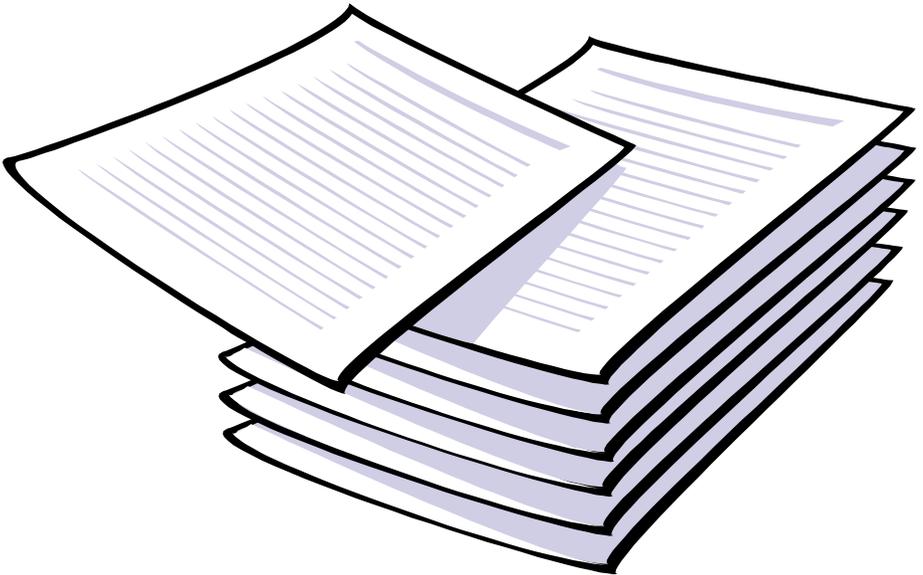
Keep in mind the following suggestions for material that must be mailed:

1. Two-sided printing not only cuts your printing costs but reduces the weight by one-half, which will mean savings at the post office.
2. Use “self-mailers” instead of pieces that require envelopes.
3. Use lighter paper. Let us show you paper samples. We may be able to suggest a lighter-weight paper that will result in reduced mailing costs without sacrificing graphic appeal.
4. Check the size. The U.S. Postal Service has established minimum and maximum dimensional standards for all its first class mail and for single-piece third class mail. Mail which does not meet the specified dimensions is subject to surcharge, and prohibitions are based upon the physical dimensions of height, length, width, and aspect ratios. (Check with your local post office for this information.)
5. Position the address section of printed matter so that it may be processed mechanically (such as the folded side of a newsletter feeding into the system before the address). Ensure that the position of your return address prevents the U.S.P.S. ZIP-code readers from mistaking it for the mailing address and sending your material back to you instead.
6. Ensure that pre-printed Mailing permits, Business Reply Mail, envelopes, etc., meet the criteria established by the U.S. Postal Service. Your local post office can give you information on the requirements.

It is your responsibility to be knowledgeable about the basic U.S.P.S. requirements. Please call your local post office if you need help planning your printed project. It may save you time and money. At present, the Post Office can provide upon request a camera-ready design for your new envelope, which will meet both their standards and your needs.

SERVICES UNAVAILABLE AT CENTRAL PRINTING

1. Central Printing is not currently equipped to do continuous-form or pin-feed form printing.
2. Central Printing does not use magnetic inks, which are often utilized to print checks.
3. The printing of items larger than 19" x 25" is not possible at present.

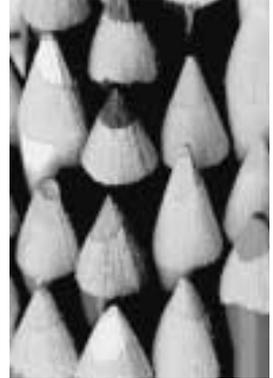


C. GRAPHIC DESIGN: PLANNING & PREPARATION

Graphic design has always been viewed as an art or craft in which the professional takes pride. Central Printing has the capability to do typesetting, add pre-designed artwork, paste-up, and to offer design suggestions and copy-fitting advice that will often save an agency time and money. However, we do not have a staff artist.

In designing your publication, please keep in mind the following advice:

Type style: The entire appearance of a printed publication can be affected by your selection of fonts. Many characteristics — delicacy, formality, etc., can be suggested by the type style used. Remember, type was designed to be read easily! Both the selection of the type style and the size to be used must be considered. Use italics with discretion! Their primary purpose is for emphasis.



Graphic art and clip art: Its use should enhance your message, not overwhelm it.

Layout: It should have a coherent “look” which will lead your readers where you want them to go.

For additional information, please see Appendices “B”, “C”, and “D”.

Step 1: Design and Layout

The first step in the design of a printed piece is preparing a layout...a blueprint of a printed job. It is important that the layout person know the purpose of the printed piece (as well as the printing process to be used) so the layout will reflect this. The layout may be a very rough visual, a semi-comprehensive, or a tightly-rendered comprehensive which looks like the finished job in all details.

The designer of a booklet or folder will often make several rough sketches (called roughs) of the cover and a two-page spread for approval, then,

once approved (often after many changes), proceed with the final layout. The final layout may be crudely drawn, but it must be accurate in size and properly marked, as it sets all the specifications used by everyone who will contribute to the finished product.

At the same time the layouts are being prepared, a blank paper dummy of the job should be made to size. This will help the designer to visualize the final appearance and to provide proper margins, bleeds, colors, etc. Attention should be paid to staying within the boundaries of standard paper sizes and to the kind of printing process to be used.

With the approved layout and paper dummy as guidance, the print shop is ready to put all the elements together.

Step 2: Camera-Ready Copy

a. Provided by the Customer

Many printing orders are submitted “camera-ready”, which means they require no designing or typesetting before going to the Photo Lab and then to the press area.

If you plan to submit camera-ready copy to Central Printing either in traditional or electronic form, please follow the standards of the printing profession in regards to the use of line art, page-numbering, marking sheets with instructions, treatment of photographs (half-tones), designs for color work, etc. **(See appropriate sub-headings for more information.)** Our staff will be happy to provide any needed advice.

Here are a few simple suggestions which can help prevent confusion, disappointment, delays, costly returns and reprints.

1. Be sure your copy is accurate. Errors on your originals are your responsibility. **We print the copy: we do not read or edit it.**
2. Submit clean, original copy. Too often sheets are produced on copy machines, faxes, or printed on machines with inconsistent output: take time to ensure the quality of your original. **(See Section “Photo Lab.”)** Keep a copy of your originals as insurance against loss.

3. If you submit your copy electronically (either on disk or via e-mail), please
 - a. Consult with the Graphics staff to assure that what you provide is compatible with Central Printing's hardware and software. **(See Appendix C "Electronic Submission".)**
 - 1) If you use a font which Central Printing does not own, you must include a copy of it with your submission. After its use, for legal reasons, Central Printing deletes it from our computers; so if you want to re-use it, you must again include a copy with the next submission.
 - b. Provide a printout as a dummy for comparison with Central Printing's output.
 - 1) If your job requires color inks, please be aware that monitors' and color printers' colors can vary greatly from what true print shop ink colors will be.
 - c. Keep a duplicate of your disk or electronic copy as insurance against loss of the original.
4. Scaling the size of your copy or graphics may require that you work with the print shop staff. In order to give your copy the best appearance on the page, we may need to use a special reduction percentage. (See below the "Diagonal line method of scaling".)

b. Camera-Ready Copy by Central Printing's Typesetting Service and Graphic Design

Description: Typesetting is a photo-mechanical process used to assemble characters into words, sentences and paragraphs for the purpose of printing.

In having Central Printing do part or all of your typesetting and/or graphic design, you have many choices to make concerning fonts, styles and sizes, layout, clip art, etc. We offer over 100 type styles for your selection.

You will also need to do good copy preparation and accurate markup, to insure correct typesetting of manuscript copy with a minimum of alteration, in the shortest possible time, and thus at the lowest cost. Careful checking and editing of text matter before it is set is a **must!** Remember, the typesetter must set copy as it is furnished, even if there are suspected errors. Therefore,

it is of the utmost importance that spelling, punctuation, grammar, capitalization, page sequencing, uniformity of style, etc., be carefully checked. Corrections made to the original manuscript are far less costly than author's alterations to reset a line of type and place it in the proper place. Even a simple change may involve resetting whole sections of a manuscript.

Creating printouts and making any changes to output prior to actual printing is considerably easier than in earlier times. But even though most typesetting now is done on computers, the ground rules established long ago for good copy preparation still apply today. Simplifying the typesetter's job helps to reduce costs and to expedite delivery.

Preparing Your Manuscript for Central Printing's Typesetters:

Important: If you anticipate a need for an electronic version of your copy, please notify the staff of Central Printing so they can work with you prior to beginning the job.

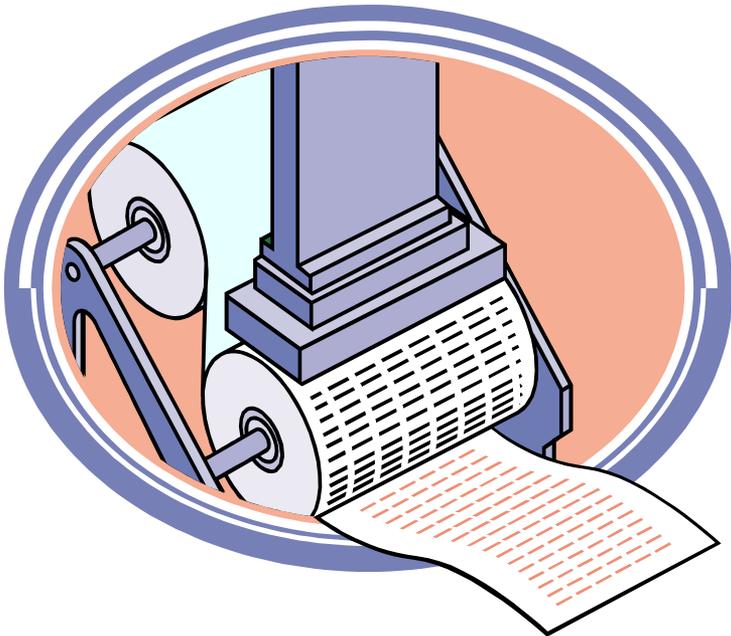
1. Paper: Use standard 8 ½ x 11 letter size 20# white. This allows for erasures and fits standard file cabinets. Never use onionskin or colored paper. Provide one full copy and make a copy as insurance against loss of the original. Typed copy should be clean, of uniform length, with wide margins, and on one side only.
2. Identification should be made at the top of each sheet to prevent possible mix-ups: use a title, running head, or any other helpful information.
3. Footnotes should be typed separately, never at the bottom of a page of text. They should be double-spaced, with triple spacing between individual notes.
4. Line Art: See "DESIGN CONVENTIONS" below.
5. Numbering: Sheets should be numbered consecutively throughout the text in the upper right-hand corner. Mark "END" on the last sheet. If a sheet is added or removed after numbering, proper notation should be made on the preceding page. If it is necessary to insert pages later, for example after page 8, the new material should be numbered 8a, 8b, etc.,

and a note on page 8 should indicate “pages 8a, 8b, etc., to follow”. (See “DESIGN CONVENTIONS” for the standards for page numbering.)

6. Reductions in the size require special planning. You will need to work with the print shop staff on the use of a special reduction percentage. (See below in “Scaling”.)
7. Make a duplicate of your copy as insurance against loss of the original.

Scaling: Diagonal line method

Remember, the camera will enlarge and reduce all dimensions and line weights proportionally in both directions —height and width— at the same time. It is not possible to change one dimension without affecting the other. Nor is it possible to put a vertical picture or graphic clip-art in a horizontal frame without cropping.



DESIGN CONVENTIONS

Use Of Line Art

Line art is the term used to describe art that is black on white, with no gradations in between. (It is also called flat art.) Line art can be reproduced in any color(s) simply by selecting different ink.

Preparing Line Art: Line art should be prepared on a clean, white surface. Lines should be dense and clean. Marks that are gray (less than 50 percent black) won't register on the film, and lines that are too fine may disappear or break up during the platemaking process. Art prepared for line reproduction can be done in red since the camera photographs red as black, but colors such as green or blue are not acceptable because the camera registers them as gray. Lines that are too close together may fill in. Remove or lighten any marks on the art itself (guidelines, for example) that you do not intend for reproduction. Finally, remove any dirt marks, rubber cement or eraser particles from the art because they may register in the photograph.

Standards For Page-Numbering Publications: A careful examination of the page-numbering system used in any professionally published newspaper, magazine, catalog, or textbook will reveal that, when the publication is opened for reading, all right-hand pages have odd page numbers and all left-hand pages have even page numbers.

A few reasons for this tradition are:

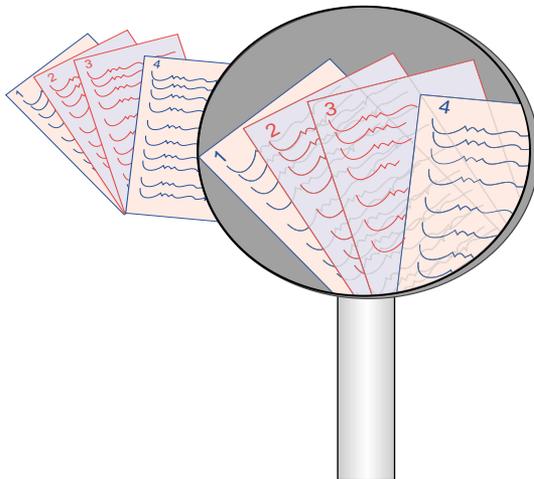
Logic: If the front of the first sheet in a book is page one, and if the book is printed on two sides, then the front of each sheet will have an odd page number.

Convenience in reading: For example, if the table of Contents in a newspaper says “Comics — page 6B”, the reader (perhaps unconsciously) knows to look at the left-hand pages of the section to find the comics.

Cost of printing: Printers and collators instinctively know that page 2 goes on the back of page 1, page 200 goes on the back of page 199, etc.

Please follow these guidelines when preparing paginated documents.

1. If you prepare copy electronically and use automatic pagination, please assure the numbering on your output follows the printing convention. If you do not use automatic pagination, complete all pages in the publication before assigning page numbers to individual sheets, Table of Contents, or Indexes.
2. Determine how all pages will be arranged, front and back, for the publication (paper-clip the front page to the back page of each sheet in the book). If you are sending your copy electronically, please do this arranging for the sample you provide for comparison with Central Printing's output of your copy.
3. When starting a new chapter or section, if you wish for the first page to be on the right-hand (front) side, sometimes the preceding (left-hand) page will be blank.
4. Assign page numbers to every page, front and back, in the publication, including blank pages. Every side of every sheet in the completed book, including blank pages and both sides of all divider sheets, will have an assigned page number, whether printed or not. (If you like, for reference, write the assigned page number on each page with a very light "non-repro blue" pencil or pen. Do not use any other kind of writing implement for this purpose.)



ELECTRONIC SUBMISSION

The almost universal use of the personal computer in many state agencies now allows the submission of copy in electronic form. (However, what you provide must be compatible with Central Printing's hardware and software: consult our staff for advice.)



The advantages of this control by the author usually include easy-to-make changes to content, design or layout, no outside typesetting costs, the opportunity to carefully proof the copy before it is received by Central Printing, and the reduction of turnaround time.

Some disadvantages are that if you want a font which Central Printing does not own,

you must include a copy of it with each separate submission: we delete it from our computers after each use. If any of what you submit is not truly compatible with our system, it may require extensive effort to make your copy's output as you want it to be.

Also, as with traditional copy, any mistakes made in your submission are your responsibility.

Please see "[Appendix C: Electronic Submission](#)" for more details.

II. AFTER SUBMISSION OF COPY:

Proofs and Paste-up

Proofs:

In the process of preparing camera-ready copy for submission by either you or by Central Printing's typesetters, a number of different kinds of proofs are available.

1. Output from our computers to the laser-printer (ordinarily in black and white) shows what your copy will look like.
2. A "page proof" shows multiple-page copy as it will lie page by page.
3. A blueline is a proof (a blue image on white background) produced by the Camera Dept. which shows the material exactly as it is to be printed, including illustrations. As bluelines are expensive, they are generally reserved for special jobs. A blueline is the last step before making the plates for actual printing.
4. Color:
 - a. You can review proof(s) printed directly from our computer to a laser-color output.
 - b. 4-color process: You will need to review the "separations" & their color-key.

PROOF FORM

Department of Central Printing

PROOF COPY
READ CAREFULLY

Interested in the proof copy of the job you recently placed with BCC Central Printing. Please check the items carefully for any grammatical, spelling, punctuation and transcription errors.

From your published file (Macintosh/Apple II) or from your computer (Chicago Print Server) and be sent to BCC Central Printing.

Check and recheck. Please clearly mark the copy. Avoid the addition of handwritten corrections and be sent to BCC Central Printing.

Remember your job will be proofed and color separations prepared at BCC Central Printing.

Any alterations you make will affect your original order. All orders are minimum of \$2.00 charge per change per order, or additional camera printing costs.

This form is checked. The information printed on this page is to be used as proof.

Comments/Instructions from Graphics Department

I have checked the information printed on this page and it is correct.

I have checked the information printed on this page and it is correct.

Comments/Instructions from Customer

Subsequent Agreement (Revised after Printing)
Fax sent to (408) 434-2211 or via Internet at <http://www.bcccentral.com>

Proofreading:

If you have submitted your copy for typesetting by Central Printing, you will need to review carefully the resulting page proof(s) from Central Printing for any and all errors. For instance, on a new business card or a revised form's proof (whether a first, second, or even third proof), check the **entire** typesetting proof for errors, not just any revisions you may have made. Errors to watch for include those such as typographical, grammatical, punctuation, inconsistencies in style or abbreviations, copy omissions, improper sequence of copy or pages, and layout/design problems. If the material is statistical or of a critical nature, have a second person read the material. Compare the

proof to the copy that you retained of the original or of any prior proof.

Proof corrections to errors that Central Printing has made are a no-fee item. But if you make a change differing from your original submitted copy (such as deciding to add a new line on a form or modifying a title on a business card) there will be a minimum \$6.00 change-order fee.

After page proofs are returned from the author, the proofs are revised until clear and acceptable. (Any change from this process should be arranged with Central Printing by the ordering agency at the time of request for printing.) All

corrections, additions, deletions and changes should be indicated in writing, preferably with a red pen. The Print Shop **WILL NOT** be responsible for corrections or changes not indicated on the proof. Once you sign the proof slip as “Approved to Print”, any proof errors you have overlooked become your responsibility. Keep a copy of any corrected proof(s), of any request for another proof, and of the “Approval to Print.”

TO: OUR CUSTOMER	DATE: 04-18-01
FAX: 555-1212	PAGES: 2
FROM: GRAPHICS	PHONE: (405) 425-2714
GRAPHICS DEPARTMENT, CENTRAL PRINTING	FAX: (405) 425-2811

Job Number: **111111**

**PROOF COPY
READ CAREFULLY**

Attached is the proof copy of the job you recently placed with Central Printing. Please check this copy carefully for any grammatical, spelling, punctuation and numerical errors.

If you are satisfied with this proof copy, check the box marked Okay to Print below and fax back to (405) 425-2811

If there are errors, please clearly mark them on the copy, check the Additional Proof Needed box below and fax back to (405) 425-2811

Important: your job will *not* be printed until we receive approval at Central Printing.

Any alterations you make which differ from your original order will require an additional \$6.00 charge per change per order, in addition to normal printing costs.

If this box is checked, the attached has been printed at a larger size to enable easier reading. The final copy will be printed at the correct size.

Comments/Instructions from Graphics Department:

Okay to Print-No alterations needed.

Additional Proof Needed-Alter or correct as indicated.

Comments/Instructions from Customer:

Authorized Signature (Required Before Printing): _____

It is very important to note that your job will **not** be printed until “Approval to Print” is given in writing to Central Printing.

PROOFREADERS' MARKS

Marking proof is quite a different operation from editing a manuscript. When you receive any sort of proof for checking and correction, remember that the Graphics Department or the Camera Department will **not** re-read the material you return, but will only look for corrections and changes. Therefore, it is vital that all marks must be in the margins, as markings which are entirely within the text might be overlooked.

The location of the correction is indicated within the text by a small wedge (a caret), a line, or a circle, but the instructions are written in the margin opposite the line affected. Marks must therefore be small enough not to intrude on another line, which may itself require a correction. Corrections that require the re-setting of more than about one line should be typed on a separate piece of paper and taped to the proof. Where the makeup is seriously disarranged, a new layout should be attached.

In general, use all means to insure clarity. Use a writing tool with a fine point. If you are not inclined to change your mind, a red ballpoint pen is ideal, but a red pencil is suitable if it is kept sharp. Each proof sheet should be initialed only after all corrections have been made.

The special proofreader marks should be learned and used. As all such codes, this one is designed to achieve maximum accuracy and efficiency. It is universally understood and any departure from it entails the risk of confusion.

Even if previous instructions exist, it is a good practice to include with any proofs the instructions pertaining to the next step. If revised proofs are required, this should be indicated. In any case, include some notation.

Central Printing attaches a proof cover sheet to all jobs being sent for proofing. Remember, your job will not be sent for final production until the proof cover sheet is signed "Approved to Print" and returned.

PROOFREADERS' MARKS

Bad letter	✕	Move to left	□
Push down space	⊥	Move to right	□
Turn over	9	Move up	□
Take out	ℓ	Move down	□
Insert at this point	∧	Indent one em	□
Space evenly	✓	Make new paragraph	¶
Insert space	≠	No paragraph	no ¶
Less space	⌒	Wrong font	<i>wf</i>
Take out all spacing	⌒	Let it stand	<i>stet</i>
Insert period	⊙	Transpose letter or words	<i>tr</i>
Insert comma	'/	Change to capitals	<u>Caps</u>
Insert colon	⋮	Change to small capitals	<u>S.C.</u>
Insert semicolon	;/	Change to lower case	<i>l.c.</i>
Insert apostrophe	∇'	Change to italic	<u><i>ital</i></u>
Insert quotation	∇∇	Change to roman	<i>rom.</i>
Insert hyphen	-/	Change to bold face	bf
Insert superior letter	2/✓	Query to author	?
Insert inferior letter	∧2	Spell out	○
Insert leaders	⊙	Set large initial	<i>init</i>
Straighten lines	///	Insert dash	/-

III. PRE-PRESS

PHOTO LAB

No single step in the offset printing process contributes as much to the final quality of your printed material as the Photo Lab. If your job will be printed directly from what you give to Central Printing, the quality of your finished product relies heavily on the quality of work you submit on your “mechanical” (the term for the actual item to be photographed).

Illustrations and Photographs

Whether Central Printing is to scan in your illustrations or if you have already done this, the following guidelines still apply.

When using photographs, clip art or illustrations, be sure to indicate their placement by numbers on the back of the picture corresponding with numbers on your copy. Note how you want them to be cropped, reduced, or enlarged to fit your layout.

Avoid fingerprints on photographs. Hold photographs at the sides, along the edges, to prevent your fingers from making contact with the surface. Deposits of fingerprint oil left on photos may be undetectable to the eye, but evident on the final reproduction.

Prevent indentations on photographs. Do not use paper clips directly on the print. Don't write or stamp on the back of the photographs: this produces marks and dents on the face.

Do not fold photographs or place them face to face where particles may collect in between them. If you must roll photographs for shipping in a tube, always roll them with the image on the outside to prevent the emulsion from cracking. It is preferable to mail photos flat, placed between two pieces of cardboard larger than the photograph. Retouched photographs are particularly susceptible to staining and smearing.

When outline rules are to be printed around photographs, use bold lines if possible. (For traditional submissions, windows for photographs should be made with one piece of rubylith cut evenly to conform with columns and borders.)

Cropping and Scaling Illustrations, Photos and Clip Art

Crop marks (indicating where the item is to be framed) should appear only in margins or borders on the dummy sheet the item is placed upon, not on the typeset copy itself. Lightly-drawn crop marks on a tissue overlay are also acceptable.

Traditionally, the most exact and flexible method of scaling is to use a proportional wheel. If your copy is prepared electronically, your software may have a scaling feature in it; if not, it may be possible for Central Printing to scale it on our computers.

Halftones

Unlike line or flat art, continuous tone originals have values of gray that vary between the extremes of black and white. Photographs are the most common form of continuous art. To be reproduced, this kind of illustration must receive special treatment. Use of a screen with the camera results in a “halftone” negative. Continuous tone material should not be attached directly to the text copy; the space reserved for it should be designated on the original paste-up.

FOUR-COLOR PROCESS

We have considered single-color and two-color work that can be reproduced as line work or in halftone. Central Printing can also reproduce continuous tone art in full color. The number of colors used for printing can be limitless, of course, but that kind of color printing can be very costly. Technological advancements in past decades have made it possible to achieve most full-color effects simply with the use of four colors: the three primary colors plus black. Called the “process colors,” they are red (magenta), yellow, blue (cyan), and black.

A photographic process results in 1 negative each for the colors (called separations) and a “color-key.” After customer approval, four separate printing plates are then produced. In four distinct runs, each plate is inked with the appropriate color and printed. Because the screens used to produce the negatives were angled, the inked dots fall into patterns (called rosettes) side by side. These colors merge optically and what results is

one of the great marvels of printing technology: a full-color image.

From this brief description of the camera and stripping operation, you can see that the mechanical has a critical function. It shows the precise relationship of all elements within so the stripping process can assemble them in their correct positions. The mechanical is photographed by the camera: all art and type copy will be reproduced exactly as seen. Small corrections can be made, but anything major can call for a “re-do”.

This is why the mechanical must be clean and precise. Any sloppiness or inaccuracies made in preparing copy for reproduction will affect the printed piece.

PLATEMAKING

After the proof has been approved, the image is etched chemically onto a plate, using a process similar to printing film or photographic paper. The plates can be of paper, polyester, or metal. A paper plate is used for a one-time run of 2,000 impressions or fewer, with only black ink and no halftones. Polyester plates are used for small runs which involve color ink(s), halftones (photos) or screens.

For the highest quality available, film and a metal plate are used for very high numbers of impressions.

IV. PRINT SHOP

PRESS ROOM

The presses that turn out the vast quantities of printed matter are complicated machines. Yet the principle of printing is extremely simple. A child prints when putting a grimy hand on a clean wall. Using a rubber stamp is printing; so is making designs with a linoleum block, and this can be repeated to make exactly the same marks. The main job of the printing press is to produce thousands or millions of identical inked impressions at a very rapid speed.

Central Printing has both a small and a large press section.

SMALL PRESS

The Small Press section is for jobs requiring 10,000 or fewer sheets of paper, with medium register and light (as opposed to solid) ink coverage. Paper or poly plates are utilized for short runs. Examples of jobs which would be done in this section would be book covers, forms, newsletters, envelopes, letterheads and business cards.



LARGE PRESS

The presses in this section can handle large and/or multi-color runs. The upper limit on size is 19" x 25"; one of these presses is a perfecter. With this wide range of equipment, we can produce nearly all printed products except continuous feed business forms or items requiring magnetic ink.

The Jet Press is used to run envelope orders of over 5,000 at a very high speed, enabling us to process your job quickly. It is limited to no more than two colors of ink per envelope.



HIGH-SPEED COPIERS

Black Copies

Central Printing operates high-speed copiers which can offer faster service on some of your documents, but it is NOT while-you-wait service.

It is advantageous to use these when you need only a few copies of a document containing many originals. However, originals should not contain halftones or screens, as they will not reproduce on the copier as well as on the offset press.



It is not cost-effective for Central Printing to use the copier if you need more than 500 sets/books of your document. Quantities over 500 are run on the offset press.

The copier offers a wide variety of ways to finish your document. Examples: staples in upper left corner, or 2 staples on the left side, or even tape binding.

The “weight” limit of paper thickness that can be run is about that of 20-70 lb text and 65-67 lb cover. Please call for further availabilities.

Color Copies

Central Printing has a high-quality color copier which is used when it is not cost-effective to do a traditional press run, or if the job request is a rush and must have color where indicated.

There are different grades of paper available, at differing costs. Please inquire.

The “weight” limit of paper thickness that can be run through the color copier is about that of 20-28 lb. text and 65 lb. matte cover stock. The maximum paper size is 11 x 17.

BINDERY

Special Finishing

The finishing touch to every printing job provides definition to the care given to each job Central Printing produces. Our bindery personnel are the last to handle your project, but the contribution they make is significant. Many printing jobs must be converted from flat sheets to their final versions, to be folded or bound in some method.

Many items such as letterheads, forms, or business cards are printed on pre-trimmed stock and need no special finishing. However, Central Printing can fulfill the following requests:

Tabbing

Tab closures can be applied to hold your items folded for mailing.

Numbering

Numbering can be done on any form and in almost any position.

Perforating

Perforating can be done on the press or as an off-line process in the Bindery.

Scoring

A score is defined as a crease in a sheet of heavyweight or cover paper to facilitate folding. The fold should always be made with the ridge or hinge on the inside for minimum stretch. Booklet or catalog covers must have a score wide enough to take the necessary number of pages with the strain on the fold.

Thermography Embossing

The thermographic process is simple. Work comes off the press with the ink still tacky; it is then dusted with a coating of thermographic powder (a colorless synthetic resin). Excess powder is removed by vibration or vacuum. The sheet is put through a heat tunnel; the powder that has adhered to the tacky ink melts, fuses with the ink, and swells up, rather like cookie dough. The resin/ink compound dries quickly to a hard finish and there you have it: “heat-embossed” raised lettering.

Foil Stamping

Foil stamping is the most economical way to imitate gold or silver, but is very expensive when compared to printing. Nothing offers as many options in appearance and allows so many effects on a variety of papers as foiling does. Lead time must be allowed for foil stamping, as this is not done at Central Printing. Allow extra time and funding if you have a custom die built.

FOLDING

Aspects of folding to keep in mind when planning your design are:

1. Unbalanced, “road map” folds where the edges do not align corner to corner are difficult.
2. The grain direction of paper influences folding. Paper grain should run parallel to the binding edge or spine of the piece. If it doesn’t, the pages will not lie flat. Covers printed on heavier stock will not lie flat either, and the surface of the cover stock will often develop cracks and wrinkles.
3. The range of paper weights which fold easily runs from 20# to 80#. Anything lighter or heavier is harder to fold.
4. When in doubt about any folding configuration, please call our office.

TYPES OF FOLDS

1. **Half Fold / Four-page fold:** This is the simplest, with only one fold along either the long or short dimension. Used for instruction sheets, newsletters, etc.
2. **Letter/Accordion/Six-page fold:** This is made with two parallel folds, either regular or accordion. Used for letters, etc.
3. **Eight-page fold:** There are 2 methods: (A) one parallel and one right angle fold, also called French fold; (B) two parallel folds. This can also be bound into an 8-page booklet with the application of glue.
4. **Twelve-page fold:** One parallel fold on a right angle fold, whether regular or accordion.
5. **Sixteen-page fold:** One parallel and two right angle folds and as three parallel folds. Used to bind 16-page booklets or collating signatures.

COLLATION

Collating Forms, Books & Booklets, etc.

Flat sheet: When you have a publication that requires collating and is a small quantity (50 to 1,000 copies), it will be collated in flat sheet form. Examples are books that are corner stitched (stapled), side stitched, or perfect bound.

Signature: Another type of collating is by signature form. A signature is multiple pages printed on one large sheet that will be folded in proper sequence. Once folded, the next step is to gather or collate the signatures in a predetermined order. Collating is done by machine or by hand, depending on the size of the job.

BOOK BINDING

After the signatures are collated, they can be bound together. There are many ways to bind your printing products. Central Printing provides saddle-stitching, side-stitching, tape binding, perfect binding, and plastic binding (either comb, coil, or Velo).

Saddle-Stitching: The multibinder collates up to 13 sheets (with cover) of 4-page flats in line, stitches it in the center, folds in half, and face trims it to size. The page size may have a range from 4" x 9" up to 9" x 12". Since signatures are always in multiples of 4 pages, if you do not conform to this standard you may have blank pages in the back of your book. This method is suitable for items of no more than 20 sheets thickness of paper.

Side-Stitching: This is used when the bulk is too great for saddle-stitching. Since the stitches are inserted about one-fourth inch from the backbone, the inside margins (gutter) must be designed wider than the side-stitched area. Side-stitched books cannot be completely opened flat.

Tape Binding: This is done along with use of the copy machine. Tape binding lies flat, making it ideal for books or reports. The tape strips have glue in the spine which melts into the binding edge of the book when it is heated. Maximum thickness of books is 1/2", or 125 sheets.

Perfect Binding: This is a variation of side-stitching and is widely used on paperback books. Instead of being stapled, the pages are held together by flexible adhesive with a wraparound cover. Minimum size is 5 1/2" x 8 1/2" to the maximum of 8 1/2" x 14". Books bound in this manner must have a minimum of 50 sheets and a maximum of 300 sheets of regular bond paper.

Plastic Binding: When designing a book for this type of binding, allowance must be made in the gutter for punching the holes.

1. Either comb or coil binding allows collated sheets to be bound on the spine. Books bound this way can be opened flat. Book thickness can range from 3/16" to 2".
2. Velo binding is a flat plastic strip which does not allow books to lie flat when opened. Book thickness can range from 1/4" to 3".

Time Differentials for Binding:

Procedure	Time Frame
Saddle-stitch	Time-saver (Up to 20 flat sheets)
Side-stitch	In-line with copy machine, or hand-process
Tape bind	Time-saver (but only as in-line with use of copier)
Perfect bound	Reasonable turnaround time
Spiral Comb	Very time-consuming for large amount of books
Spiral Coil	Very time-consuming for large amount of books

OTHER FINISHING

Padding

Forms, memo pads, and scratch pads are the usual types of material to be padded, normally in 50 to 100 sheets per pad. Cold glue is applied to bind the paper's edge to the chipboard backing. If using NCR paper, the usual standard per pad is: 50 sets of 2-part, 33 sets of 3-part, 25 sets of 4-part, 20 sets of 5-part, 15 sets of 6-part.

Fan Apart

This is done using a special adhesive designed for carbonless paper. This allows individual sets of forms, from 2-part to 6-part NCR paper.

Triad Wrap

The “wrap” refers to an extra flap which folds around the front of the book. This is generally used with NCR paper, for such items as receipt books. The flap protects the remaining forms underneath from “pressure impressions”.

PACKAGING, MAILING, AND SHIPPING

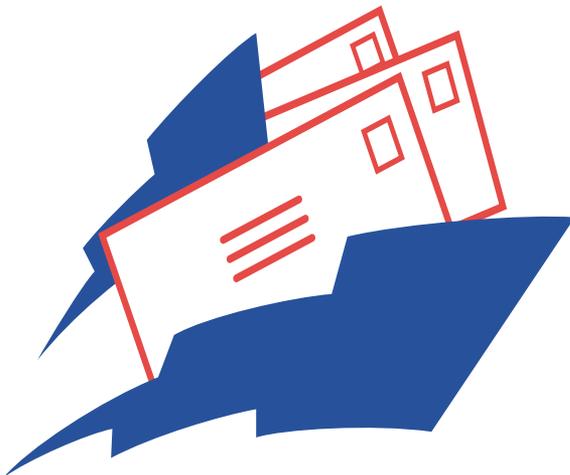
Shrink Wrapping: Polyethylene film is heat-sealed around the product, which is then sent into a heated tunnel to shrink the film. This method allows the item to be visible for recognition while keeping it free from dust. The usual amount for ordinary paper is 500 sheets per package, but you can specify how many. We can wrap anything 11” x 17” or smaller.

Paper Wrap: We use Kraft brown paper for products larger than 11” x 17”. It is more expensive than shrink-wrapping because the Bindery personnel have to wrap by hand.

Delivering Your Job: We have several methods for delivery, depending upon the quantity of your order and its destination. We will choose the most appropriate and economical means available.

Special Services

Central Printing offers cost saving presort mailing services. You can even use our presort and first class permit. Please contact the staff for details.



V. MISCELLANEOUS

STANDARD FORMS

Central Printing keeps a preprinted supply of many of the Office of State Finance forms ready for customer use. Those we do not carry are generally available for an agency to reproduce from OSF's "Procedures Manual", which is available at the Office of State Finance Comptroller's link on:

<http://www.osf.state.ok.us/comp-frm.html>

The use of customized versions is discouraged because of the extra cost and time it takes when your agency could be saving money by using standard OSF forms.

Please call for prices of the OSF forms we stock. The standards for OSF and other preprinted forms are:

- 1) Size is 8.5 x 11 {except as noted}, with approximately 100 sheets per pad.
- 2) Padded. If needed as "fan apart" {or loose}, you must specify that on your order.

(Vsn)Form	Description	Type	Sets/Pad	
(94) OSF 3	Notarized Claim Form.....	3-part NCR	33 sets/pad	
(93) OSF 3C	Contract Purchase Order.....	5-part NCR	20 sets/pad	
(90) OSF 3C	Contract Continuation Form.....	5-part NCR	20 sets/pad	
(94) OSF 9	Imprest Cash Form.....	3-part NCR	33 sets/pad	
(95) OSF 11A	Agency Special Account Report.....	20# white	50 sheets/pad	
(96) OSF 14	Claim for Disbursement of Payroll Withholdings	3-part NCR	33 sets/pad	
(96) OSF 15A	Claim Jacket Form.....	3-part NCR	33 sets/pad	
(96) OSF 15B	Inter/Intra Payment.....	3-part NCR	33 sets/pad	
(96) OSF 18	Actual & Necessary Expense Travel Voucher	3-part NCR	33 sets/pad	14"
(96) OSF 19	Travel Claim Voucher.....	3-part NCR	33 sets/pad	
(96) OSF 19	Travel Claim Voucher Long Version.....	3-part NCR	33 sets/pad	14"
(93) CP2	Purchasing Requisition to Central Purchasing	3-part NCR	33 sets/pad	
(93) CP001	Change Order Form.....	3-part NCR	33 sets/pad	
(92) CAP	Project Requisition to Construction & Properties	3-part NCR	33 sets/pad	
(98) Official Depository of Oklahoma.....		3-part NCR	33 sets/pad	
(90) PFT	Request for Payroll Fund Transfer.....	20# white	50 sheets/pad	
(90) PWC	Request for Payroll Warrant Cancellation.....	20# white	50 sheets/pad	
(90) MWC *	Request for Miscellaneous Warrant Cancellation.	20# white	50 sheets/pad	

*Copy of this form is supposed to be in an agency's "Procedures Manual" & can be copied. The Procedures Manual should

Item	Size	Paper	Description	Unit
Advice of Deposit	3.5 x 10	110# Buff index	Perforated at .5 F & B	50/pkg
Longevity Certificate: 5-19 Yr	8.5 x 11	60# Parchtone	Blue & gold seal/blue	Each
Longevity Certificate: 20-24 Yr	8.5 x 11	60# Parchtone	Gold foil seal/blue	Each
Longevity Certificate: 25-Yr+	11 x 14	60# Parchtone	Gold foil seal/blue	Each

Two sizes of Presentation Folders for certificates are available.

Central Printing does retail electronic versions of the Oklahoma State Seal in several formats (two color or single color - jpg, eps,tif or bmp).



ITEMS WHICH ARE UNAVAILABLE AT CENTRAL PRINTING

1. The State Agency Telephone Directory is no longer produced by Central Printing. Instead, the Office of State Finance maintains access through their Web site. The current main address (as of March 2002) is <http://www.youroklahoma.com>.
2. Door decals of the state seal are not done by Central Printing. They are available through Oklahoma Correctional Industries. We do retail electronically many versions of the state seal.
3. Central Printing does not produce color state maps. For large black-ink maps, contact the Department of Transportation.

VI. PRINT ORDER HISTORY AND RETENTION

Negatives and Plates

Unless customers request negatives and plates returned to them, we maintain negatives and plates in our files for two years. At that time, we generally purge our files by sending the negatives and plates to you for review. Please consider these carefully before returning them for either re-filing (for future use) or for destruction.

If you maintain your own files, please bring both your negative(s) and plate(s) with your order. This saves time by having the negative available in case the old plate is no longer usable. Please keep the negatives and plates flat; if the plate is bent, we cannot use it.

Business card plates: We do not keep any plates of these on file, due to the number of changes usually made by customers each time cards are ordered. A new version of the card is created each time an order is placed. This is why you must send some sort of sample with each order: for ink, paper, and layout instructions.

Revisions to previous publications: If you send an old form with a change for Central Printing to make, please highlight the change; this will help us notice it and avoid using an old plate on file to print your form incorrectly.

If you send camera-ready copy of any item, please notify Central Printing whether this is an entirely new form, or if it is merely a new version of an old form and you want any out-of-date negatives and plates for that item to be removed from use.

VII. BILLING: JOB TICKETS/PRICING/INVOICES/CREDIT MEMOS

Job Tickets:

All Job Tickets are generated on the day that Central Printing receives your order. Your agency receives a WHITE copy of each Job Ticket when your job is delivered, picked up, or shipped.

Your agency will need to **keep the white Job Ticket originals** since duplicates are not furnished with the invoices. It is your responsibility to ensure that your agency's Accounts Payable section receives either the originals or duplicate copies of the white Job Ticket for later comparison with the Invoice.

The white Job Ticket is **not** an invoice from which you pay, it is a record for you to keep to compare with your monthly invoice. **NOTE:** Any prices your white Job Ticket has preprinted on it will **only** reflect any pre-pricing which was done. The **final price** which appears later on the Invoice will contain the extra costs for any and all additional work performed after the initial pre-pricing.

Invoices:

Your agency will receive an invoice from Central Printing around the second week of each month. This invoice is for ALL JOBS finished and delivered to your agency in the previous month. Your Accounts Payable section will then match all the Job Tickets previously received with the invoice.

Credit Memos:

If a credit memo is issued to your agency you will need to send one copy of the credit memo and one copy of the invoice for which you wish the credit memo applied to the Dept. of Central Services Finance Division, Accounts Receivable. Credit memos must be applied to invoices.

CONCLUSION

The purpose of printing is to transform ideas and information into a form that is appropriate, convenient and legible. Learning the terms and methods Central Printing uses can only make the entire process easier. In the creation of this manual, our intent is to help state agencies achieve economic efficiency in fulfilling their printing needs. If you have any questions not covered in the manual, please let us know.

APPENDIX A: Glossary

It is odd how a word can develop contradictory meanings. In graphics arts and printing it happens often — sometimes embarrassingly, sometimes expensively. Take “glossary,” which springs from the Greeks’ term for tongue or language. In the Middle Ages, a “gloss” meant a helpful explanation or definition added in the margin of a manuscript. But somehow the word “over” became attached to it and this phrase came to mean to artfully mislead or to divert attention from something you’d rather not talk about. A glossary is a collection of glosses: useful definitions of specialized, frequently misunderstood terms. Your printed pieces are more apt to emerge on target, on time and on budget if everyone uses the same references.

Access: The act of executing, retrieving, or using.

Against the Grain: The folding of paper at right angles to its grain.

ASCII: (American Standard Code for Information Interchange) This is one of the several basic codes that have been used in telecommunications. It consists, generally, of a seven-bit data structure in various configurations of zeros and ones, plus a parity bit for each alphanumeric character and symbol.

Author’s Corrections: These are instructions about the typesetting proofs concerning voluntary changes and/or corrections which differ from the original copy as submitted (such as deciding to add an e-mail address to your business card after viewing your proof). These kinds of revisions made to the typesetting proofs are chargeable to the customer.

Backing Up: Printing the second side of a sheet as a separate process.

Bad Break: Incorrect word division.

Base Aligned: Each character appears to sit on the same imaginary line, called a baseline.

Basis Weight: Weight of a ream of paper if cut to the standard basic size for that grade of paper.

Baud: Describes transmission speeds of electronic data (also called bits per second or BPS).

BF: Abbreviation for bold face type.

Bleed: The area of artwork which is extended beyond the trim edge of a page or sheet, usually a 1/8" extension.

Blue-line: In offset lithography, a photo-print used as a final proof before printing. It should be folded and assembled to show you what the finished piece will look like.

Body: The text portion of a typesetting job.

Bold: A thick and dark variation of the basic typestyle.

Bond Paper: A grade of writing or printing paper, often used in correspondence.

Booklet: A small stitched book of eight pages or more, usually with a self cover.

Border: A plain or ornamental frame around type composition.

Boxed or Boxed In: Small paragraphs or lines of type enclosed with rules or borders.

Brochure: A pamphlet bound in small booklet form.

Bullet: A solid circle or oval which is used to emphasize text in outline format.

Camera Ready: When paste-up materials are considered to be complete, they are ready to be photographed to produce negatives and plates with which to print.

Caption: A heading or explanation adjacent to or below a picture, a sidebar, etc.

Center Spread: A continuous sheet which forms the center pages of a saddle-stitched book or booklet. Center-spread artwork will be interrupted only by the staples holding the publication together.

Change-Order: This refers to any voluntary changes made by the customer (such as any new additions or a correction to an author's mistake) after any proof has been presented by Central Printing's typesetters. The change-order fee is generally chargeable to the customer.

Character: A single letter, number, form of punctuation, or symbol generated from the keyboard.

Collage: Any number of photographs or pieces of artwork arranged in any manner on a page as a composite picture.

Column Rules: Lines between columns of type. A rule is any line — a divider between sections or a border around illustrations or a whole page.

Composition: The part of the printing process which pertains to typesetting, marking-up, etc.

Condensed: A variation of a typeface (font), in which characters are thinner or narrower.

Copy: For printers, copy refers to all the material furnished for reproduction. For writers and layout designers, copy is typewritten manuscript only, not any artwork.

Copy-fitting: Fitting copy within a specified area to meet certain constraints. This also means to determine the number of typeset lines that will be set from a typewritten manuscript.

Conversion: The process that changes one code structure or language to another for processing.

Cover Stock: Heavier, stiffer, more durable paper used for book and booklet covers.

CR: Carriage return. (In documents created in a word-processing program, an invisible “hard return” can interfere with text or graphic images if the copy is “re-flowed” due to changes or additions.)

Crop: With photographs and graphic illustrations, it is the act of marking in the margins of the layout to show the Camera department how the items are to be proportioned.

Data: Representation of facts, concepts, or instruction in a formalized manner that can be stored, manipulated, and transmitted by machine.

Data Communications: Interchange of data from one point to another.

Design: The act of choosing and placing graphic elements and text so that the finished product communicates for the producer to the user.

Display Type: Type sizes of 14-point and above.

Drill: Punching 1, 2, or 3 holes in a publication for binding purposes.

Dummy: This is the preliminary layout showing the position of text and illustrations as they are to appear in the final product.

Editing: To revise copy.

Embossing: Traditional raised embossing results in printed letters or artwork “in relief” above the paper. “Blind” embossing is an inkless impression, usually on the reverse of the paper, resulting in a raised, non-

printed area on the front. A relatively new and less expensive process, thermal embossing, gives the inks a raised, shiny appearance; this method is generally used on business cards.

Family of Type: The type faces of a related design, in all point sizes.

Fan-apart: Method in which multi-page NCR forms are glued together in single sets.

Felt Side: In paper manufacturing, the top side of the sheet; it provides the better reproduction in printing.

Flat: The measured and marked “board” on which a mechanical is to be placed.

Flop: The mirror image of the original.

Floppy Disk(ette): Portable magnetic storage medium used by computers.

Flush: Refers to when copy is aligned at the left margin, the right margin, or centered within a line measure.

Foiling: Process by which metallic foil is made to adhere to paper. In general, it is risky to overprint a foiled item later with a laser printer; the heat produced can cause the foiling to peel.

Fold: The term can be used to refer to a single sheet, unbound, with one or more folds.

Folder: A 9” x 12” portfolio, with or without glue on its “pockets”.

Font: A typeface variation within a family or type style. (With the increased use of computer word-processing programs, this word is often used to mean the traditional term “family of type”.)

Format: The size, shape, style, and general make-up of a printed piece. It has a slightly different meaning within computer word-processing programs.

GBC: Machine used to punch the holes for plastic ring binding on a book's spine.

Grain: The direction in which most of the fibers lie in a sheet of paper.

Gripper Edge: The leading edge of paper the printing press "grabs" in order to pass sheets through. Area needed for the gripper edge must be allowed for in the design of a printed piece.

Gutter: The blank space between columns of type. Gutters which are to be adjacent to the spine of the publication often need more space to allow for the binding process.

Hairline: This describes a very fine or delicate line.

Halftone: A film, print, plate, or reproduction in which details and tone values of the continuous-tone original are modified by the Camera department into a reproducible pattern of tiny dots of varying size.

Head: A display line at the top of printed matter; a headline.

Indent: To begin (or end) a line farther in from the margin than from the body of text.

Insert: A specific piece printed for planned insertion into a publication.

Input: This term is now often used to refer to data entered into electronic media.

Italic: An oblique (slanted) variation of a basic typestyle.

Job Standards: Values set by the author of a publication for line length, font size, style(s), line spacing, etc. These standards will remain unchanged within the system unless an authorized modification is made.

Job Ticket: A form on which instructions concerning the job are printed, usually as output from Central Printing's computerized job tracking system. Customers retain the signed white copy of the 2-part NCR paper when a job is received, in order for their Accounts Payable department to compare later with the Central Printing Invoice.

Justify: To set flush left and/or flush right margins within a given measure.

Laid Paper: It has equally-spaced parallel lines watermarked into it.

Layout: End product of the design process, it is a coherent and comprehensive sketch of the whole publication.

Leading: The vertical distance between two lines of text, measured from the baseline to baseline. (See "Primary Line Spacing".)

Line Drawing: A drawing, usually in ink, which has black and white tones.

Logo: The name of a company or a product in a special, exclusive, often copyrighted design; it is sometimes combined with artwork.

Manuscript: The edited copy submitted to a typesetter. Central Printing requires typewritten copy which follows the general rules of submission.

Margin: This is the white space between printed copy and the edge of the printed sheet.

Measure: This refers to the width of a line of type and is usually expressed in picas; six picas are equal to one inch.

Mechanical: The assembly of all copy elements (photographs, drawings, type proofs, photo-prints, etc.) into one or more units on a board, which will be copied by a camera. This is also called "pasteup".

Modem: The acronym for modulator/demodulator, it “translates” computer digital data into an analog version which is transmissible on ordinary telephone lines; a modem on the receiving end will then translate the analog information into acceptable digital data.

Negative: Film which contains the image to be printed.

Opacity: With papers, this refers to the ability to minimize show-through from the back side or from the next sheet. With inks, this means how well they can conceal color beneath them.

Outline: This may refer to a fine line or border placed around copy or a photo. It is also the procedure used to “drop out” the background of a photograph.

Output: This is the product or image produced by a computer or typesetter.

Overhang: Anything that projects beyond the main body is said to overhang.

Overlay: In artwork, this is a transparent covering over copy; on it is marked where to apply any instructions or corrections; it also can indicate where colors break.

Page Proof: The typesetter outputs a page proof, which shows the actual page layout of type and position of illustrations.

Pasteup: Before the first photographic step, this is the preparation of camera-ready copy in which each element is placed in position.

Perfect Bound: Binding procedure for holding pages together with a wraparound cover glued on at the spine of the publication.

Photocomposition: Any method of setting type photographically to produce images on paper or film.

Pica: A unit of horizontal measurement; there are 12 points to a pica, and approximately 6 picas to one inch.

Point: A “point” is a unit of vertical measurement of a typeface, from the top of the ascender to the bottom of the descender, plus a small amount of white space above and below. This white space prevents the lines from touching when typeset.

Press Proof: This is a proof of a color subject, done in advance of the press production run.

Pre-separated Art: It will have a separate overlay prepared for each color in the illustration.

Primary Line Spacing: This is the vertical spacing between two lines.

Processor: This unit develops and fixes the image on photographic material.

Proofreading: It involves detailed checking of any typeset matter against the original manuscript, for the purpose of eliminating errors or imperfections before the final proofing or printing.

Publication: This is any magazine, newsletter, tabloid, booklet, or other format which is published on a regular basis.

Ragged: This is text with uneven margin or margins (unjustified copy).

Register: This means to adjust the pages of a form so they will print exactly on the back of those printed on the first side.

Register Marks: These are marks used to check the registration of two or more colors; these crosses (or other marks) are placed at the edge of artwork, negative(s) or printed sheets.

Reverse: This is a “negative” image: white type and a dark background. When using a reverse, choose type styles that are bold and simple in design.

Revised Proof: This is the most recent proof made after corrections have been applied to any prior proof(s).

Rough: Preliminary visualization of a layout or drawing.

Runaround: This is type that runs around a space remaining in the text, which will later be filled by a display initial or some other art.

Saddle-Stitch: This procedure places wire staples on the binding edge and folds the sheets around the stapled line to form the spine of the publication. This method is suitable for booklets containing no more than 20 sheets' thickness of paper.

Score: Scoring impresses a mark in a sheet of paper, usually cover stock, in order to make folding easier.

Script: When referring to type faces, it means a cursive style. The term "scripting" means the act of printing a hard copy.

Self-Cover: This term means all pages of a publication are printed on the same weight and color of paper stock.

Self Mailer: Folders, booklets, broadsides, flyers, etc. designed with the mailing address to be easily readable can be mailed without an envelope.

These are usually folded and either tabbed or stapled (generally at the top) for ease of processing through Post Office machines.



Side-Stitching: This bindery method is used when the bulk is too great for saddle-stitching. A line of stitches (staples) is placed on the outside of the publication at 1/4" from the spine; the inside margins (gutter) must be designed wider than the side-stitched area. Side-stitched books cannot be completely opened flat.

Signature: This is a large sheet containing printed pages which, when folded properly and trimmed, will form multiple pages in a publication.

Size: This refers to the vertical point size of type selected. (See “Type Size”; also known as “font size” in word-processing applications.)

Software: These are the application programs written for computers; they are so numerous and variable that if you plan to submit copy electronically, you must check with Central Printing for compatibility with our system.

Space Out: This means to insert spaces between words or letters in order to make the line of type cover a specified measure (such as when justifying margins at both sides).

Stet: This is a proofreader’s mark which means “leave copy as originally set.”

Stock: Paper.

String: Refers to a collection of characters.

Stripping: This means to position the negative(s) exactly as their images will be reproduced on the printing plates.

Super shift: A third selection from the keyboard.

Tab: In the bindery, “tabs” are the small adhesive patches placed to keep publications folded. In typesetting, it refers to a method of subdividing page width to produce tabular work in columns.

Telecommunications: Electronic data transmission.

Thermography: The inks on freshly-printed sheets are dusted with a resinous powder, which, when heated, fuses and forms a raised, shiny surface.

Text: This is the main printed matter of a book or page; this term excludes titles, headings, notes, tables, and display lines.

Type Face: A type design (See also “Family of Type”).)

Typesetter: Where typesetting takes place.

Type Size: This is the vertical point size of the type selected. (See also “Size”).)

Type Style: This is a complete alphabet comprised of numbers, punctuation marks, and special symbols (3, “, @, %, #, etc.) of a particular size and weight.

Typography: This is the art of assembling alphabetic characters and miscellaneous related characters into words, sentences, and paragraphs for the purpose of printing.

Underscore: Underscoring adds emphasis to a word or group of words by placing a line (“rule”) underneath.

Units: These are used to measure the width of individual characters as well as the spaces between letters and words.

Velo: A method of binding books with a plastic strip.

Word Space: The spacing between words.

Work and Turn: This is a method of printing on the front and back of a page. Once the first press run has dried sufficiently, the paper is turned over to print its other side.

APPENDIX B: Printing Trade Customs

1. Cancellations: All orders that are canceled after work has been started are subject to charges for materials ordered and work performed.
2. Experimental work performed at a customer's request, such as drawings, compositions, plates (including lithographic plates), presswork and materials will be charged at current rates.
3. Alterations: Proofs are done according to the original specifications. **If work is done a second time (or more), due to customer's correction of an original's error or a voluntary change-order, such extra work will carry an additional charge,** at current rates for work performed.
4. Proofs: One proof will be submitted of typesetting done from the original copy. Any corrections are to be made on the proof copy and a SIGNED request for a revised proof is to be indicated on the proof's cover sheet. If the proof is correct, the SIGNED proof cover sheet needs to be marked "O.K. to Print", and then all material is either returned or faxed to the print shop. The printer is NOT responsible for errors if incorrect work is printed as per the customer's O.K.
5. Quantity: The amount ordered is subject to a trade over- or under-allowance of 10 percent, unless specific arrangements are made in advance.
6. Delivery: Unless otherwise specified, the price quoted is for a single shipment F.O.B. the customer's local place of business. All shipments outside the OKC Metro area are shipped at the customer's expense. All deliveries are routed to the agency's main office unless otherwise specified at the time of the order placement.
7. Acceptance: Estimated prices proposed by Central Printing reflect current costs of labor, paper, inks and/or other materials and are subject to all cost adjustments that pertain to increases or decreases, effective as of the date of such changes. Estimates are guaranteed for 30 days only.

8. Paper stock furnished by the customer will be properly packed, free from dirt, grit, torn sheets, bad splices, etc., and of proper quality for printing requirements. Additional cost due to delays or impaired production because of improper quality of supplied stock will be charged to the customer.
9. Copy preparation and layout: All copy submitted by customer is to be legible and organized and, when necessary, accompanied with an adequate layout. Any prior cost estimate will have been based on standardized paste-up formats and typesetting, unless previously specified.
10. Color proofing: Because of the difference in equipment and conditions between the color proofs (separations) and the pressroom operations, a reasonable variation between color proofs and the colors of the completed job will constitute an acceptable delivery.

These trade customs have been in general use in the printing industry throughout the United States of America for more than 50 years.



APPENDIX C: Standards for Electronic Submission

Software:

At the present Central Printing's Graphics Department can accept copy in the following programs:

Compatible with high-volume printing, these are for fairly sophisticated page design:

- QuarkXPress 3.x
- Adobe Pagemaker
- Microsoft Publisher (minimal use)
- Adobe InDesign

These less-powerful applications can print as all-color (to the color copier only) or black-and-white:

- MicroSoftWord
- WordPerfect 8.0
- PowerPoint
- Lotus Word Pro

Creating your documents in Pagemaker can facilitate their use at Central Printing.

If your design includes four-color process, we accept this Macintosh and Windows-based software:

- Adobe Acrobat
- Adobe Illustrator
- Adobe Pagemaker
- Adobe Photoshop
- CorelDraw 8.0
- Macromedia Freehand 8.0
- QuarkXpress 3.x
- Adobe InDesign

These media are acceptable:

- CD-R and CD-RW; Zip 100 MB; 3.5" 1.44 MB disk

Note: Cross-platform files from IBM to Macintosh and back is not a problem in most cases.

We cannot accept the following:

Unix based projects.

Graphics Department Hardware:

At present we have available:

High quality scanners

Two IBM and Two Mac machines

CD/DVD Burner

Imagesetter

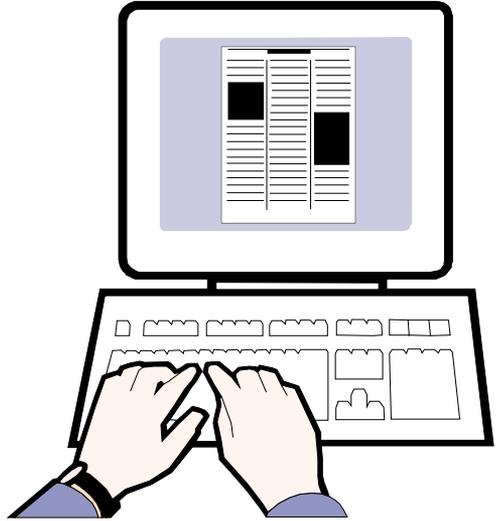
Polyester Plate Maker

Color Printer/Copier

Scanner: We can scan up to 11" x 17" originals, in full color. It has limited OCR capability.

Printers/Output:

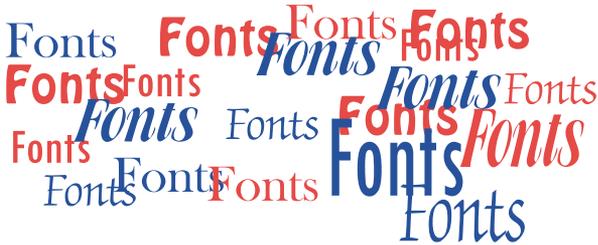
1. Full four-color, but only for short runs
2. Polyester plates
3. Imagesetter
4. Black and White



Please call the Graphics Department at 425-2714 if you have any questions.

APPENDIX D:

Typestyles / Fonts



Fonts can cause the biggest headaches for printing service bureaus. Fonts do not normally embed in a document. So, when a document is opened on another computer that doesn't have the font used to create it, the computer will substitute another font in its place. This substitution can cause the text to reflow and change the very look of the document. Please send the files of the fonts you used to build your document. Even if you feel it is a common font, we will still require them for a quality result.

The staff of DCS-Central Printing sincerely hopes this Print Guide will be a source of information as you design and create your documents.

Thank You