

TechLines

Technical Information Sheet

P2

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Web Roll Stock and Paper Terminology

Wide inventory available – from Novel News to #2 Coated Offsets

Ripon Printers stocks over 3,000,000 lbs. of roll stock in a variety of types, brands and sizes to meet the needs of our printing clients. Our inventory is managed with the assistance of a custom computer system which pinpoints over 750 different items: current pounds in stock, each truckload on order and paper reserved for every specific customer order. Following is a general list of our inventory.

COLDSET STOCKS

- Uncoated offsets (free sheets)
- Uncoated groundwoods
- Newsprints
- Directory
- Novel News

HEATSET STOCKS

- #1, #2 & #3 coated offsets (free sheets)
- #4 & #5 coated groundwoods
- Super calendered

Additional information about the availability of a specific paper is available upon request. A variety of mill brands are included in stock or are available for special order. All of our offset papers are acid free papers. Lightweight opaques (eg. 25#, 30# and 35#) and groundwoods of differing brightness may be readily obtained from our regular mill and merchant sources.

On some occasions, a project created for uncoated stocks calls for a full background color tint. Since colored roll stocks are not readily available, we recommend printing full screen backgrounds with ink colors. Send us a sample or select a Pantone color. We will then select an appropriate screen percentage – especially if the color of your choice has a large percentage of transparent white in its formula.

Glossary of Terms and Specific Conditions

ACID FREE PAPER: (Also referred to as alkaline). Paper of neutral or basic chemical makeup. Often this paper is brighter and more opaque than traditional “acid” paper. It has a longer shelf life and is therefore often specified for archival reasons. All our uncoated offsets and opaques are acid-free.

BASIS WEIGHT: Weight (in lbs.) of 500 sheets of a certain “basis size.” Usual “basis sizes” for our roll papers are:

25"x38" for offsets, opaque offsets, groundwoods, and catalogs

24"x36" for newsprints and directories

17"x22" for bonds

From the above, we can deduce that 32 lb. newsprint (basis size 24x36) is the same actual weight as 35 lb. groundwood or offset (basis size 25x38).

Also, 50 lb. offset (basis 25x38) equals 20 lb. bond (basis 17x22).

BOND PAPER: Writing paper with slightly different characteristics than paper designed for general (eg. catalog) use. Occasionally colored bonds are interchanged for colored offsets.

BOOK PAPER: Equivalent to offset paper. Sometimes referred to as text paper.

BRIGHTNESS: The capacity of paper to reflect light. The brighter the paper, the “whiter” it may appear. Ripon stocks paper with **brightness** of about 59 (newsprint) to 94 (opaque offset).

CALENDERED PAPER: Extremely smooth, uncoated paper, requiring heatset printing.

CALIPER: The thickness of paper, measured in 1/1000 inch or “points.” 1/1000 inch = 1 pt. Approximate **caliper** of our standard 50 lb. offset is .0038 or 3.8 pt. (See also PPI).

$$\text{CALIPER} = 1 / \text{PPI} \times 2$$

COATED PAPER: Paper with special substances applied to its surface during manufacture which gives it a varying degree of gloss. Requires ovens for drying while printing.

COLDSET/OPEN WEB: (Also referred to as NON-HEATSET). No ovens are employed in this printing process used to print on uncoated papers.

COLORED PAPER: Many papers, including offsets and bonds, are available in a variety of colors. Users are cautioned that a given color (eg. “canary”) will vary between competitive grades from different mills and sometimes between separate lots from the same mill.

FINISH: The surface of paper – how rough or smooth it is. Ripon Printers utilizes paper that has a very slight roughness or “tooth” to prevent smearing or setting off of ink from one sheet to the next. Different mills use a variety of terms to describe the finish of their papers. Some commonly used terms for finish are given here with the smoothest papers being at the top:

Super calendered	Machine
Calendered	Vellum
English	Antique
Fine	Textured
Smooth	Hi-Bulk
Regular	

Ripon prints regularly on smooth (regular), machine and vellum. *Check with us for our recommendation on finish for a specific stock.*

FREE SHEET: Paper containing no groundwood fibers. May be either acid or acid free (alkaline). Our offset and opaque offsets are wood-free sheets, characterized by their whiteness and comparatively long shelf life.

GLOSS: Degree of "shininess" a paper exhibits.

GROUNDWOOD PAPER: Paper containing minute unbleached or partially bleached wood fibers ("ground wood") in varying degrees. Brightness ranges from 59 (newsprint) up to 83 (specialty hi-brite groundwoods).

HEATSET: A term describing the printing process which employs ovens to flash out the volatile organic compounds (VOCs) from the ink, leaving the pigments behind. The **heatset** process is necessary when coated or calendered papers are used.

HOLDOUT: Ability of paper to resist ink penetration.

OFFSET PAPER: The standard uncoated free sheet in use daily at Ripon in weights of 40 lb. to 70 lb. (basis 25x38).

OPACITY: The capacity of paper to stop light and prevent show-through of printing. A numerical rating is used to specify opacity, with 83 being low and 94 high for uncoated stocks.

OPAQUE OFFSET PAPER: (Also referred to as OFFSET OPAQUE). Higher quality offset paper; generally having both greater opacity and brightness. Available in weights of 25 lb. through 70 lb.

OPEN WEB/COLDSET: (Also referred to as NON-HEATSET). No ovens are employed in this printing process used to print on uncoated papers.

PPI: Abbreviation for **Pages Per Inch**.

$$\text{PPI} = 1 / \text{CALIPER} \times 2$$

ROLL WIDTHS: A variety of roll widths (which determine the width of folded signatures and depth of tabloid pages) are stocked, depending upon customer needs.

UNCOATED PAPER: Paper which is homogeneous throughout, with no extra substance applied to its surface during making. **Uncoated paper** requires no ovens for printing.

WHITENESS: The "color" shade of white paper; which is not to be confused with brightness. Some papers are "blue-white," others tend to be "cream-white."