

TechLines

Technical Information Sheet

P2

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Changes in RED

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 **Hi-Brite** 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

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 96 (opaque offset).

CALENDERED PAPER: *Glossy*, 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. 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 84 (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."

Maximum Page counts for Saddle Stitch projects

Max Page	Wt.	Grade	Stock	Brightness
88	70#		Uncoated Offset	84
96	33#		5pt Novel News	60
104	60#		Uncoated Offset	84
128	50#		Uncoated Offset	84
	42.5#		Opportunity Offset	83
	80#	#2 & #3	Coated Free Sheet (offset)	89/84
144	30#		Yellow Newsprint	60
152	70#	#2 & #3	Coated Free Sheet	89/84
	40#		Uncoated Offset	84
	35#		Ripon 80 Hi-Brite Groundwood	80
	35#		Ripon 70 Hi-Brite Groundwood	70
	30#		Newsprint	60
160	40#		Opaque Uncoated Offset	94
	60#	#2	Coated Free Sheet	89
	60#	#5	Coated Groundwood	72
176	27.7#		Newsprint	60
192	50#	#4 & #5	Coated Groundwood	
	24.6#		Newsprint	60
200	50#	#3	Coated Free Sheet	84
208	22.1#		White Directory	60
216	45#	#5	Coated Groundwood	76
	45#	#4	Coated Groundwood	80
224	45#	#3	Coated Free Sheet	84
232	22.1#		White Directory 40% PCW	84
240	40#	#4	Coated Groundwood	76
	40#	#5	Coated Groundwood	72
248	38#	#4	Coated Groundwood	76
256	36#	#5	Coated Groundwood	72
	36#	#4	Coated Groundwood	76
272	34#	#5	Coated Groundwood	72
288	32#	#5	Coated Groundwood	70
312	30#	#5	Coated Groundwood	72