Millcraft Paper 101

PAPER QUIZ

Paper and Design

- Paper can help create the look and feel of your design
- Paper can create a mood or emotion
- Paper choice can greatly effect the cost of your printed project
- Choosing the right paper for printing technique you are going to use is an important part of the design process

PAPER BASICS

PAPERMAKING
TYPES
TRAITS
WEIGHTS
SIZES
SWATCHBOOKS
DEFINITIONS
SPECIFYING

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"The right paper can be the difference between a moment we treasure, a moment we remember and the second we forget."

Paper can be part of your design.

PAPER BASICS
TYPES OF PAPER

Paper is manufactured for a broad range of uses—industrial, sanitary, newsprint and boxboard. The most common papers specified by designers for commercial printing include:
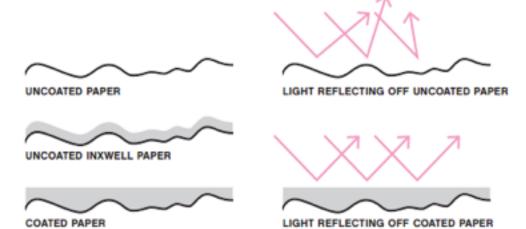
COATED

OFFSET AND OPAQUE

TEXT AND COVER

WRITING

SPECIALTY

UNCOATED PAPER

LIGHT REFLECTING OFF UNCOATED PAPER

UNCOATED INXWELL PAPER

COATED PAPER

LIGHT REFLECTING OFF COATED PAPER

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Coated Paper

- Coated papers have refined coatings to give paper the ability to for excellent ink hold out

- Coated papers are typically in shades of white

- Coated papers are excellent for larger print runs as it is less expensive to make

- If accurate color is important coated paper may be your best option

Coated Paper

- Finishes in coated paper include: Gloss, Matte, Dull, Silk or Satin

- Some uses for coated paper include catalogs, annual reports, brochures, pocket folders and magazines. Any subject matter that needs to pop with ink is great for coated paper.

Uncoated Paper

- Uncoated papers do not contain clay coatings are more porous and tactile
- Numerous finishes and textures are available in uncoated papers such as Felt, Linen, Laid and smooth (the list goes on and on)
- Uncoated papers absorb ink
- Advantages are hundreds of color options and unique finishes, some have fibers added

Uncoated Paper

- Uncoated Text and Cover papers are more expensive to produce due to colors and textures, the paper machines are smaller and run slower

- Uncoated paper is used for letterhead, pocket folders, brochures, greeting cards, high-end covers for reports, envelopes, etc.

- Uncoated papers can be watermarked

WRITING

A LOCALIZED WATERMARK APPEARS IN A SPECIFIED POSITION ON THE SHEET. TRADITIONALLY, THESE ARE CENTERED.

IN A NON-LOCALIZED OR RANDOM PLACEMENT WATERMARK EACH SHEET CONTAINS A COMPLETE WATERMARK, BUT THE POSITION IS NOT CONSISTENT.

COMMERCIAL FLAP ENVELOPE

MONARCH POINTED FLAP ENVELOPE

COMMERCIAL WINDOW ENVELOPE

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Specialty Papers

- Specialty papers cover a broad base of options such as label paper, translucent paper, metallic papers, synthetic papers, security papers etc.

- Some Papers are called C1S which means coated one side and are used in packaging, pocket folders, signage etc.

- Specialty papers can require specific printing processes, getting help from your printer or paper representative is advised.

COMPARATIVE WEIGHTS

American paper manufacturers make paper to a weight standard, called the basis weight. Basis weight is determined by weighing 500 sheets of any grade of paper in the proper basic size.

COMPARATIVE BASIS WEIGHTS

The weight of 500 sheets (one ream) of a standard basic size.

Writing 17 X 22	Text 25 X 38	Cover 20 X 26	GSM
20	50	—	75
24	60	—	90
27	68	—	100
28	70	—	105
—	78	—	115
32	80	—	120
36	91	50	135
40	100	55	150
—	110	60	162
—	119	65	175
—	122	67	180
—	146	80	215
—	—	92	250
—	182	100	270
—	—	120	324
—	—	130	350
—	—	160	432
—	—	180	486

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Swatch Books

- Swatch books are produced by mill manufacturers to help designer and printers specify paper for print jobs
- These information bibles will give you specific weights, sizes and color information for each grade of paper
- Paper merchants (such as Millcraft) supply these to printers and designers for free

TRAITS

FORMATION
HOLD THE PAPER UP TO A LIGHT SOURCE. A WELL-FORMED SHEET APPEARS UNIFORM, WHILE A POORLY FORMED PAPER HAS CLUMPS OF FIBERS, GIVING IT A CLOUDY LOOK.

BRIGHTNESS
BRIGHTNESS IS OFTEN LISTED IN SWATCHBOOK CHARTS. BRIGHT WHITE SHEETS RANGE FROM 92 TO 100 WITH 100 BEING THE BRIGHTEST.

CONSISTENCY
YOU CAN SOMETIMES SEE OR FEEL INCONSISTENCIES. TO BETTER PREDICT HOW EACH SIDE WILL PRINT, ASK YOUR PRINTER TO PROVIDE AN INK DRAWDOWN ON BOTH SIDES OF THE SHEET.

ENVIRONMENT
ENVIRONMENTAL QUALITIES ARE GENERALLY INCORPORATED INTO SWATCHBOOKS AND PRINT PROMOTIONS.

OPACITY
LAY AN UNPRINTED SHEET OF PAPER ON TOP OF A PRINTED PAGE TO SEE HOW MUCH PRINTING SHOWS THROUGH.

SMOOTHNESS
ASK ABOUT THE PAPER'S SHEFFIELD VALUE.

PRINTABILITY
REQUEST SAMPLES THAT DEMONSTRATE HOW A PAPER PRINTS BEFORE SPECIFYING IT. YOUR PAPER MERCHANT SALES REP OR PRINTER CAN PROVIDE REAL-WORLD PROJECTS PRINTED ON THE PAPER, IN ADDITION TO MILL PROMOTIONS.

PERMANENCE
PAPER COMPANY'S ANSI CERTIFICATION FOR ACID-FREE AND/OR ARCHIVAL PAPER. CID-FREE INFORMATION IS OFTEN INCORPORATED IN SWATCHBOOK COPY AND CHARTS.

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BRIGHTNESS VS. SHADE

Brightness is measured as the percentage of light reflected from the surface of the paper.

A blue-white and yellow white paper can have the same brightness value but look very different.

A paper with a brightness of 98 is an extremely bright sheet with almost all light being reflected back to the viewer.

Four-color process images pop on bright white papers, as they illuminate transparent printing inks.

For pieces with a great deal of copy, a natural shade of white is preferable to minimize eyestrain

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The Paper Representative

Your paper merchant can help you pick the right paper product for the specific effect you desire

Digital vs offset printing

Budget concerns

Color consideration

Mock ups

Plain paper samples

Printed samples

Cutting Print Costs

- Reduce size of printed piece
- Reduce weight of paper
- Reduce number of pages
- Reduce quantity printed
- Use coated paper
- Avoid dark colors and heavy textures
- Avoid bleeding ink off of page and crossovers

General Advice

- Ask for recommendations to match the printer's equipment
- Get ink drawn downs
- Have mock-ups made
- Seal the ink with a varnish
- Adjust curves in prepress for uncoated paper
- Always ask client if they plan to mail
- Standard sizes will keep you out of trouble

PAPER BASICS

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DEFINITIONS
SPECIFYING

ENVELOPE BASICS

MEASURING
MAILING
WINDOWS
PRINTING
SIZING
DEFINITIONS
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PRINTING BASICS

THE
DESIGNER'S
GUIDE TO
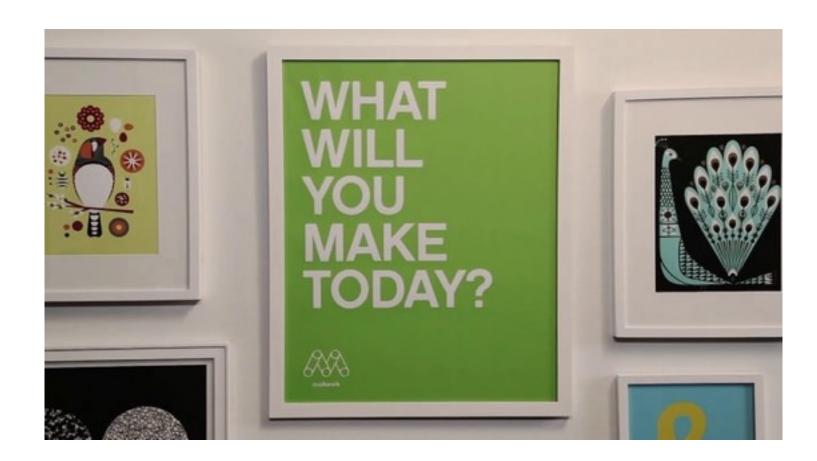ACHIEVING
BRILLIANT
RESULTS ON
UNCOATED
PAPER

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Millcraft on the Environment

Millcraft is committed to the distribution of environmentally responsible paper and forest products.

We are FSC certified which means we are monitored by a third party to insure our mill partners follow North American environmental guidelines.

We sell both recycled and recyclable paper and packaging products.

Thank You

- ## Questions?

Terri Price-Deep
pricedeept@millcraft.com

John Rudland
Rudlandj@millcraft.com

www.millcraft.com