

On Paper

BY CONSTANCE J. SIDLES



The Ineffable Mystery of Paper Grades

WHEN THOTH, THE EGYPTIAN GOD OF learning, gave writing to the ancient Egyptians, he deliberately made the system difficult and obscure—to confine literacy to a small caste of priests who had to prove their dedication by devoting long years of study to their craft.

If Thoth were here today, I'm sure he would embrace paper manufacturers as his own. Paper mills today make so many grades of paper, with

categories of printing papers are uncoated book (for books, brochures, and newsletters), coated book or offset (magazines, catalogs, calendars, posters), cover (covers, heavy posters, postcards), board (displays, folders, covers), and bond (stationery, laser printers, copiers).

Of course, this being the paper industry, terminology has been complicated by independent-minded mills who insist on their own vocabulary. Some mills produce text paper, for example, which other mills call bond or uncoated book. Some mills make publication paper, which is what others call coated book. Some mills get fancy (writing paper, not bond); others prefer to be prosaic (business paper, not bond).

The actual grading of papers within a given category is also a happy remnant of times gone by. Bond paper, for example, is graded by its pulp content and weight—the highest quality is 28-pound, 100 percent cotton. Coated offset is graded by its weight and brightness level—the highest quality is a number-one sheet (with a brightness above 85) weighing 100 pounds or more.

Even the weight of paper means different things in different categories: 20-pound bond is the weight commonly used for laser printers, while 20-pound offset is used for Bibles and has the thickness of tissue paper.

This discrepancy is due to the fact that paper mills determine basis weight by weighing 500 sheets (a

ream) of paper. Unfortunately, they use different-sized sheets, depending on the category of paper. Mills originally did this because they used the same balance to weigh everything, and it wasn't very accurate. So mills cut lightweight paper into bigger sheets that they could weigh more precisely (see table at left).

In Europe, many grades are described in grams per square meter, which has eliminated a lot of the confusion. But not here in the U.S.

So how can a poor paper buyer purchase the right grade? I recommend that you follow three steps:

1. Determine performance needs, including the kind of printing you plan to buy; the way you want your designs to appear; and your off-press requirements. Then buy paper *specifically* formulated for your needs. If you design a laser-printer job that must print two-sided, for example, be sure to buy paper that is made for laser printers *and* is designed for two-sided printing. Otherwise you'll suffer paper jams, creases, and curl.

2. Determine the quality level you need within a given paper category. Quality can mean the paper's heaviness, its pulp content, brightness, gloss, thickness, opacity, and surface finish. Make sure that the paper you buy meets those standards.

3. Decide how much money you can afford to spend. Then go back and look at points 1 and 2 again.

Paper buying is an art. You must balance what you want, what you can afford, and what's available. If that task seems as crazy and impossible as everything else connected with the paper business, consider this: It's probably no accident that Thoth was the baboon god. ♦

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Common ream sizes

measurement units	type of paper
17" x 22" x 500 sheets	bond and writing
24" x 36" x 500 sheets	newsprint
25" x 38" x 500 sheets	book and offset
lbs. per 300 sq. ft.	paperboard, heavy cartons

such a bewildering array of standards and terms, that even the most hierophantic Egyptian would throw up his hands in despair.

A big part of the problem stems from the fact that papers are still categorized by the jobs they were historically designed for. It may sound painfully obvious, but book papers were used to make books, newsprint for newspapers. Paper quality, weight, size, strength, and finish were unique to each business. Since there was no overlap, there was no need to standardize.

None of us confine ourselves to using paper the same way our forebears did—we just talk as though we do. Thus, the most common cat-