

STANDARD SAMPLES

General appearance

Government standard samples referenced in this publication may be obtained from (1) Chief, Paper and Materials Control Section, Production Planning Division, Stop POL, (2) Chief, Paper and Physical Testing Division, Stop QC, or (3) the Contracting Officer, at the Government Printing Office, Washington, DC 20401.

Samples are available for most specifications and colors. Requests for samples should include the paper grade identification code, e.g. JCP A60, along with basis weight(s), color(s), and number of copies.

Note, the "Government Standard Sample" cited in the specification standard in Part 1 of this publication is used to illustrate general appearance properties of the paper, such as color, finish, formation, or cleanliness, which are not easily described in quantitative terms. The standard sample serves as the Government's referee or physical sample for the referenced properties and is used to determine conformance of the supplied paper stock to the Government's requirement for *color, finish, formation, and cleanliness*.

For example, there is no quantitative means to easily describe paper formation. Therefore, the "Government Standard Sample" is used to illustrate the Government's minimum requirements for that property.

Color standards

If the color/shade of the paper is not specifically stated in the requisition or solicitation, the color of the paper shall be interpreted to mean "white" complying with the stated color/brightness requirement in the specification standard.

Many specifications allow colors other than the ones established by the Government which are listed below. In these instances, agencies in cooperation with the Government Printing Office or any Regional Printing Procurement Office, must objectively describe the desired color by (1) submitting a paper color swatch consisting of a total 1.5 m² in area to show the color desired for inclusion in the solicitation, or (2) alternatively, provide a "brand name paper and color OR EQUAL" to identify the desired color. (The brand name and color should be verified periodically since paper companies often discontinue colors.)

Generally, colored mimeograph, writing, manifold, bond, ledger, index, and xerographic papers are required to match the Government's standard for the colors: blue, buff, green, pink, salmon, or yellow. The color coordinates for the colors are shown in Table 1. For some papers, such as for xerographic paper and carbonless paper, the commercial colors may be acceptable and the following language is included in the specification: "When a match to one of the established Government color standard has not been specified, the commercial standard for these colors and white is applicable."

An extensive set of color standards has been established for the vellum-finish cover grade and their color coordinates are included in Table 2. A "good" color match to any specified color standard can be obtained when a *mill run* quantity of paper is purchased. A mill run quantity can be as small as 5,000 pounds of paper to a minimum of 20,000 pounds depending on color and manufacturer. For paper matching the colors in Table 2, they are typically available from the GPO central office or when the color is purchased in a mill run quantity.

Other established color standards often used to specify white and off-white papers are listed in Tables 3 and 4.

Color matches are measured instrumentally or "visually" rated for acceptability. A critical color match can be designated as *precision* or *regular*. Each one carries a specific set of criteria for evaluating the *acceptability of the color match for hue, chroma, or saturation difference along with an overall assessment*.

Table 1: Business paper colors

Blue	Pink
$L^*=81.5$	$L^*=71.8$
$a^*=-10.4$	$a^*=35.5$
$b^*=-5.0$	$b^*=2.1$
Buff	Salmon
$L^*=88.5$	$L^*=79.7$
$a^*=-2.11$	$a^*=21.3$
$b^*=-25.7$	$b^*=27.7$
Green	Yellow
$L^*=78.6$	$L^*=91.6$
$a^*=-16.2$	$a^*=-7.7$
$b^*=5.4$	$b^*=40.6$

Table 2: Vellum-finish cover colors

Brown	Saddle tan
$L^*=56.8$	$L^*=46.1$
$a^*=14.0$	$a^*=7.3$
$b^*=30.3$	$b^*=18.9$
Canary yellow	Sand gray
$L^*=89.1$	$L^*=70.4$
$a^*=-5.3$	$a^*=2.8$
$b^*=68.3$	$b^*=16.6$
Dutch blue	Sun orange
$L^*=56.1$	$L^*=67.8$
$a^*=-3.6$	$a^*=39.5$
$b^*=16.3$	$b^*=49.4$
Killarney green	Venice blue
$L^*=61.4$	$L^*=77.4$
$a^*=-18.2$	$a^*=-17.0$
$b^*=17.8$	$b^*=-12.0$
Light gray	Vermillion
$L^*=68.8$	$L^*=43.2$
$a^*=0.5$	$a^*=46.5$
$b^*=10.2$	$b^*=20$
Peach tan	Victoria green
$L^*=69.5$	$L^*=64.7$
$a^*=8.2$	$a^*=-23.7$
$b^*=26.0$	$b^*=1.1$
Pecan brown	
$L^*=63.5$	
$a^*=6.7$	
$b^*=22.6$	

Table 3: Selected White Standard

B (White 82 Paper dated 3/1/98)	E (Cotton dated 8/1/94)
$L^*=93.3$	$L^*=94.0$
$a^*=1.0$	$a^*=-0.5$
$b^*=-2.0$	$b^*=4.0$
C (A220 dated 8/1/77)	F (Chemical pulp dated 8/1/94)
$L^*=92.0$	$L^*=93.5$
$a^*=-0.5$	$a^*=-0.1$
$b^*=7.5$	$b^*=3.0$
D (E30 dated 8/1/77)	
$L^*=93.5$	
$a^*=-0.5$	
$b^*=1.5$	

Table 4: Other color Standards

Cream White
$L^*=92.4$
$a^*=10.9$
$b^*=-19.2$