

Use in information: This paragraph is informational only and is not exclusively definitive of the end use.

For high quality offset printing. The 45 g/m² paper is generally used for open forms, including multiple copies face only. The 60 and 75 g/m² white papers are for stationery, face only; all colors, for open forms, legal documents, ledgers, etc., face and back, suitable for processing through high speed copiers and laser printers, execution with pen and ink, erasing quality, and permanence (archival quality). Opacity of white paper is not a specified factor and, therefore, is subject to variation. Printed matter may include text and light line illustrations.

Stock: Not less than 25 pct cotton or linen fibers; the remainder bleached chemical woodpulp.

*Note:*¹ Not less than 30 pct postconsumer recovered fiber. Any percent over 30 percentage points, is encouraged, provided that the requirements of this Standard are met.

Acidity: pH value by cold extraction shall be not less than 7.5. The paper shall contain not less than 2 pct calcium carbonate.

Any deviation in this requirement shall be sufficient cause for rejection of the paper.

Grammage: (g/m²) 45 60 75
Basis weight: 17 by 22 inches, 500 sheets
(pounds) 12 16 20
A tolerance of ±5 pct shall be allowed.

Folding endurance: Average, each direction, not less than—
M.I.T. (double fold) 60 75 75
Schopper (double fold) 65 80 80

Tearing strength: Average, each direction, not less than (mN) 240 320 400
Equivalent (grams) 25 33 41

Ruling and writing qualities: Lines ruled and characters written with pen and ink shall be clear cut and free from excessive feathering.

Erasing quality: Paper shall retain good ruling, writing, and typing quality, texture, and surface appearance, without ink spreading after repeated erasures. Samples from the delivery shall show no greater resistance than the standard sample to removal by abrasion of typewritten characters.

Curl: Paper shall lie flat before and after processing through a high speed copier or laser printer with either no tendency to curl or with a curl which can be overcome under reasonable working conditions.

General appearance: Paper shall conform to the standard sample(s) adopted by the Government.

Color: The paper in the order (or publication) shall be uniform with the brightness of the white paper not less than 82 pct. The color variation permitted is DE(CIELAB)=1.0.

For colored stock, paper shall match one of the established standards. Standards are blue, buff, green, pink, salmon, or yellow. Colors shall not fade or transfer (rub off) and shall appear even and uniform on the surface of the sheet. Stock shall not be 2-sided. Color coordinates for selected standards are included in Part 3.

Finish and formation: Shall be uniform.

Cleanliness: The dirt count for each side of the paper shall not exceed 250 specks per square meter. No sample sheet (600 to 650 cm² in size) shall contain more than one defect with an equivalent area of 0.25 mm² or greater.

Sampling and testing: Shall be conducted in accordance with standards in Part 2, *Government Paper Specification Standards*. The precision requirements of the acceptance criteria (Part 4) shall apply for all properties except for stock, acidity, filler content, and folding endurance. Any deviation in the "excepted" properties is a critical defect and shall be sufficient cause for rejection of the paper. Prior-to-production testing of paper is required. Conformance to these requirements will permit the printing of the infinity symbol (∞) in the document or publication. (Reference: ANSI/NISO standard Z39.48-1992.)

Unless otherwise specified, the following is automatically waived when printing or duplicating is to be accomplished on commercial contract

Sizing: Paper shall be surface- and internal-sized suitable for satisfactory printing on both sides of the paper on high-speed offset presses equipped with continuous flow or brush dampening systems.

Color: Shall match the Government's standard sample for color. A deviation of DE(CIELAB)=3.0 from the color standard for white and 2.0 for colored stocks is allowed. A color difference 1.0 DE unit between felt and wire sides is permitted.

For information only, the CIELAB values (Ill D65, 10° observer) of the white color standard are

$L^*=93.3$
 $a^*=1.0$
 $b^*=-2.0$

Surface: Shall be free from lint, fuzz, or any particles which will pick, lift, fluff, or pile on the blanket under normal press conditions. Paper shall lie flat with either no tendency to curl or with a curl which can be overcome under reasonable working conditions.

Size and trim: Sheets: Paper shall be furnished in the size(s) ordered and shall be flat, trimmed square on four sides with clean smooth edges, and evenly jogged. A tolerance of ±2 mm (1/16 inch) shall be allowed except for sheets 216 by 356 mm (8½ by 14 inches) or less; then a tolerance of ±1 mm (1/32 inch) shall be allowed. Successive sheets within any package shall not differ from each other by more than 0.5 mm (1/64 inch). Paper with the long dimension 813 mm (32 inches) or less shall be considered

square if the variation does not exceed 1 mm (1/32 inch); over 813 mm (32 inches), 2 mm (1/16 inch).

Watermark:² Shall be the seal of the United States, with the word "recycled," one star, and the year of manufacture, on a basis of four times on a sheet 432 by 559 mm (17 by 22 inches), one in each quarter. The watermark shall be clear and legible. When viewed from the felt side of the sheet, the design shall appear as illustrated, but in proper size. Full size copy will be supplied upon request.



[Year of manufacture]

Grain: Direction of the grain on flat paper shall be as ordered.

Pressroom conditions: The bulk of this paper will be used in air-conditioned pressrooms maintained at 24°C ±2°C and 45 pct ±8 pct relative humidity.

¹This requirement may be waived by the ordering agency when purchasing less than a mill run quantity and so stated in the procurement document. Note, recovered material (cotton/linen) is not a postconsumer recovered fiber.

²The inclusion of the word "recycled" in the watermark is permitted only with 30% postconsumer recovered fiber in the paper. See Style A watermark in Part 3.