

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

For use in laser printers, high speed, plain paper copiers and xerographic equipment as specified.

Unless the option below is specified, the following 'basic' specification applies.

Stock: Groundwood pulp, not to exceed 1 pct.

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

Absolute moisture: Average (percent) 4.5
A tolerance of ±0.5 percentage point shall be allowed.

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

Stiffness: Gurley, average, not less than—
Machine direction (mg) 135
Cross direction (mg) 60
OR

Taber, average, not less than—
Machine direction (units) 1.9
Cross direction (units) 0.9
Any deviation from requirement shall be sufficient cause for rejection of the paper.

Tearing strength: Average, each direction, not less than (mN) 350
Equivalent (grams) 36

Opacity: Average, not less than (percent) 86
No individual specimen shall average less than (percent) 84

Smoothness: Average, each side, (units) 160
A tolerance of ±30 units shall be allowed.
Any specimen averaging more than 30 units from the nominal value shall be sufficient cause for rejection of the paper.

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.

Ruling and writing qualities: Lines ruled and characters written with ball point and felt tip pens shall be clear cut and free from excessive feathering.

Surface: Shall be free from lint, fuzz, wrinkles, waviness, folds, holes, tears, and other detrimental defects.

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 ±1 mm (1/32 inch) shall be allowed for sheets 216 by 356 mm (8 1/2 by 14 inches) or less. Successive sheets within any package shall not differ from each other by more than 1 mm (1/32 inch). Paper shall be considered square if the variation does not exceed 1 mm (1/32 inch).

Rolls: Roll width and diameter shall be as ordered. A tolerance of ±2 mm (1/16 inch) shall be allowed for width and ±26 mm (1 inch) for diameter.

Roll winding: Roll paper shall be tightly wound at even tension and shall not contain more than the specified maximum number of splices per roll. The number of splices permitted per roll is determined by the roll diameter as ordered. On rolls 1,016 mm (40 inches) or less, a maximum of three splices per roll shall be allowed. Splices shall be neatly and securely overlap-pasted and made with a repulpable adhesive which will not permit the splice to separate. The adhesive may be applied from a tape form backing, provided the backing is removed, leaving only the adhesive component on the splice. The adhesive shall not cause the splice to adhere to adjacent laps. The tails of the splices shall be neatly and evenly removed without damage to adjacent laps. Splices shall be flagged at both ends with projecting colored markers, not pasted to the splice, or otherwise clearly marked.

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

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 a target brightness of 82 pct for white paper. The color variation shall not exceed DE(CIELAB)=1.0.

For colored stock, paper shall match one of the established standards or as specified. Standards are blue, buff, green, pink, salmon, or yellow. Colors shall be pulp-dyed. When a match to a Government color standard has not been specified, the commercial standards for these colors or white are applicable. Color coordinates for selected standards are included in Part 3.

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

$$L^*=93.3$$

$$a^*=1.0$$

$$b^*=-2.0$$

Formation: Shall be uniform.

Cleanliness: The dirt count for each side of the paper shall not exceed 650 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.

Performance: Shipments of any qualified product shall perform satisfactorily on laser printers and high speed xerographic equipment. There shall not be more than one paper-caused-jam or one document with unacceptable image quality due to the paper per 5,000 continuous-copy run at atmospheric conditions of 21 ±5.5 °C and 50 ±20 pct relative humidity.

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 except as noted in the standard.

OPTION

Option A: Alkaline paper. This option is for products requiring above average permanence.

The following requirements replace the same in the 'basic' specification and are added to the specification.

Stock: 100 pct bleached chemical woodpulp.

Note: Not less than 30 pct postconsumer 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 7.0. 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.

¹This requirement may be waived by the ordering agency when purchasing less than a mill run quantity and so stated in the procurement document.