

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

For face and back multicolor offset printing of books, pamphlets, catalogs, folders, circulars, etc. The 75, 90, and 105 g/m² papers may be used for solid reverses or heavy halftones. The 120 g/m² paper is for use in printing posters and similar work and not for books, pamphlets, and the like. Printed matter may include text, line illustrations, and halftones up to 150-line screen. Sheets 216 by 356 mm (8½ by 14 inches) or smaller are used principally for reproduction by small offset presses at speeds in excess of 2,000 copies per hour.

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

Stock: Groundwood pulp, not to exceed 1 pct. The total lignin content of the paper shall not exceed 3 pct of the fiber weight.

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 shall average not less than 6.5.

Grammage (g/m²) 60 75 90 105 120
 Basis weight: 25 by 38 inches,
 500 sheets (pounds) 40 50 60 70 80
 A tolerance of ±5 pct shall be allowed.

Bursting strength: Average,
 not less than (kPa) 90 100 120 150 170
 Equivalent (lb/in²) 13 15 18 22 25

Opacity: Average, not less
 than (percent) 86 89 91 92 94
 No individual specimen shall
 average less than (percent) 84 87 89 90 92

Thickness: Average (mm) . 0.075 0.100 0.120 0.140 0.160
 Equivalent (inch) 0.0030 0.0039 0.0047 0.0055 0.0063

A tolerance of ±0.013 mm (0.0005 inch) shall be allowed. Paper shall be uniform and shall not vary more than 0.011 mm (0.0004 inch) from one edge to the other.

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 81 pct. The color variation shall not exceed DE(CIELAB)=1.0.

Finish and 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.

Sampling and testing: Shall be conducted in accordance with standards in Part 2, *Government Paper Specification Standards*.

OPTION

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

The following requirements replace the same in the 'basic' specification.

Stock: 100 pct bleached chemical woodpulp.

Note: Postconsumer fiber, in any percentage, 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.

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.

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 heat-set web or sheet-fed offset presses equipped with continuous flow or brush dampening systems.

Tensile strength: For roll stock only, average, not less than—
 Machine direction (kN/m) 2.5 3.5 3.8 4.1 4.5
 Cross direction (kN/m) 1.2 1.4 1.6 1.8 2.0
 Equivalent—
 Machine direction (kg/in) 6.4 9.0 9.7 10.5 11.5
 Cross direction (kg/in) 3.1 3.6 4.1 4.6 5.1

Color: Shall match the Government's standard sample for color. A deviation of DE(CIELAB)=0.5 from the color standard is allowed.

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

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

Pick resistance: Sheet-fed offset: Average, each side, not less than 13-A Dennison wax number for sheet sizes exceeding 432 by 559 mm (17 by 22 inches); 10-A Dennison wax number for sheet sizes 432 by 559 mm (17 by 22 inches) or less.

Web offset: Average, each side, not less than 10-A Dennison wax number.

No individual specimen shall average less than 11-A, 8-A, and 8-A Dennison wax number, respectively.

Curl: Paper shall lie flat with either no tendency to curl or with a curl which can be overcome under reasonable working conditions.

Surface: Shall be free from lint, fuzz, or any particles which will pick, lift, fluff, or pile on the blanket under normal press 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 (⅛ inch) shall be allowed except for sheets 216 by 356 mm (8½ by 14 inches) or less; then a tolerance of ±1 mm (⅜ inch) shall be allowed. Successive sheets within any package shall not differ from each other by more than 0.5 mm (⅛ inch). Paper with the long dimension 813 mm (32 inches) or less shall be considered square if the variation does not exceed 1 mm (⅜ inch); over 813 mm (32 inches), 2 mm (⅛ inch).

Rolls: Roll width and diameter shall be as ordered. A tolerance of ±2 mm (⅛ 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. On rolls over 1,016 mm (40 inches), a maximum of four 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 while passing through a drying oven maintained at 200 °C. 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.

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.