



Standard Guide for Selection of Permanent and Durable Artist's Paper¹

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1. Scope

1.1 This guide covers artist's papers used in the preparation of permanent or semipermanent artwork. Some works of art are expected to last several hundred years, and others might be expected to last 50 years, or less.

1.2 In selecting artist's papers for a given life expectancy, papers with acceptable strength are evaluated for life expectancy through accelerated aging.

1.3 This guide is to be used for guidance in the purchase of permanent artist's paper.

1.4 As a great variety of artist's papers are to be found in the market place, extensive information on the various kinds of paper in use by artists is beyond the scope of this guide. This guide is concerned mostly with life expectancy of the paper.

1.5 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 ASTM Standards:

- D 585 Practice for Sampling and Accepting a Single Lot of Paper, Paperboard, Fiberboard, and Related Products²
- D 589 Test Method for Opacity of Paper²
- D 644 Test Method for Moisture Content of Paper and Paperboard by Oven Drying²
- D 645 Test Method for Thickness of Paper and Paperboard²
- D 646 Test Method for Grammage of Paper and Paperboard (Mass per Unit Area)²
- D 689 Test Method for Internal Tearing Resistance of Paper²
- D 774 Test Method for Bursting Strength of Paper²
- D 828 Test Method for Tensile Breaking Strength of Paper and Paperboard²
- D 985 Test Method for Brightness of Pulp, Paper, and Paperboard (Directional Reflectance at 457 nm)²
- D 1030 Test Method for Fiber Analysis of Paper and Paperboard²

D 1968 Test Method for Terminology Relating to Paper and Paper Products²

D 3424 Test Methods for Evaluating the Lightfastness and Weatherability of Printed Matter³

D 4714 Test Method for Determination of Effect of Moist Heat on Properties of Paper and Paperboard²

D 4988 Test Method for Determination of Calcium Carbonate Content of Paper²

D 5634 Guide for Selection of Permanent and Durable Offset and Book Papers²

2.2 TAPPI Test Methods:

T 236 Kappa number of pulp⁴

T 400 Sampling and accepting a single lot of paper, paperboard, fiberboard, or related product⁴

T 401 Fiber analysis of paper and paperboard⁴

T 403 Bursting strength of paper⁴

T 410 Grammage of paper and paperboard (weight per unit area)⁴

T 411 Thickness (caliper) of paper and paperboard⁴

T 412 Moisture in paper and paperboard⁴

T 414 Internal tearing resistance of paper⁴

T 425 Opacity of paper (15°/diffuse illuminant A, 89 % reflectance backing and paper backing)⁴

T 452 Brightness of pulp, paper, and paperboard (directional reflectance at 457 nm)⁴

T 479 Smoothness of paper (Bekk method)⁴

T 480 Specular gloss of paper and paperboard at 75 degrees⁴

T 494 Tensile breaking properties of paper and paperboard⁴

T 509 Hydrogen ion concentration (pH) of paper extracts (cold extraction method)⁴

T 538 Smoothness of paper and board (Sheffield method)⁴

T 544 Effect of moist heat on properties of paper and board⁴

2.3 ISO Standard:

ISO 9706 Paper for documents—Specifications for permanence—Normative Annex—Special instructions for determining kappa number⁵

¹ This guide is under the jurisdiction of ASTM Committee D-6 on Paper and Paper Products and is the direct responsibility of Subcommittee D06.20 on Permanent Records Paper.

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² Annual Book of ASTM Standards, Vol 15.09.

³ Annual Book of ASTM Standards, Vol 06.02.

⁴ Available from the Technical Association of the Pulp and Paper Industry, TAPPI Press, Technology Park, Atlanta, GA 30348.

⁵ Available from American National Standards Institute, 11 West 42nd St., 13th Floor, New York, NY 10036.