

NOTES ON PAPER FOR PAGE-TYPE

2101AA and 2101AB "DATASPEED * " RO (RECEIVE ONLY) PRINTERS

A customer desiring to purchase stationery should conduct a trial run of the stationery under actual service conditions so that a conclusive test can be made before a large lot is purchased. The quality of the stationery may tend to deteriorate if not used within a period of 6 months or if stored in an extremely hot or damp location. For best results, stationery should be purchased in quantities that will be used within a 6-month period; until used, it should be stored in a cool, dry location.

A special teletypewriter paper, TKS-104, is available and should be used in the DATASPEED RO Printers since this paper gives more legible copy and lint free operation than other teletypewriter paper.

The TKS-104 teletypewriter paper can be obtained from most commercial paper suppliers by placing paper orders per Teletype specification TKS-104. Paper orders should include quantity, Teletype TKS-104 number and color (white is recommended).

The following requirements for paper cover plain paper in continuous lengths, which is furnished in rolls.

Paper requirements for the DATASPEED printers may be divided into two parts: the more important requirements (listed in Parts 1 through 6 and Tables A and B), and the additional requirements which relate to the indeterminate factors controlling quality (listed in Parts 7 through 10). In order to get best results, it is recommended that all of the requirements be used in ordering this type of paper. In all cases the dimensions as specified in this document should be followed.

The factors which are important in purchasing paper in roll form for friction-feed teletypewriters are described in the following paragraphs.

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1. DESCRIPTION

The paper is a one-ply bond, friction-feed printer paper intended for use with INK-TRONIC® teletypewriters where the principle of electrostatic deflection is used to propel tiny ink droplets onto the paper to form characters. Printing ink color used in the printer is violet; therefore, white or canary yellow (optional) paper is recommended.

2. DIMENSIONS

The width of the paper used is 8-1/2 inches nominal and it shall not be less than 4-29/32 inches nor greater than 5 inches in diameter. The paper roll should be concentric with the strawboard tube on which the paper is wound. This strawboard tube should have an inside diameter of not less than 0.95 inch nor more than 1.10 inches. The tubing should be approximately 1/8 inch thick. Steel cups, each with a central hole, must be inserted in the ends of the tube for shipping purposes.

3. WINDING

The paper should have clean-cut edges and should be wound evenly and tightly on the tube to avoid damage to the edges when handling. Each roll must contain one continuous piece without splices or tears, and it should be free from paper dust and lint. The length of the paper wound on a 5 inch roll is approximately 490 feet.

4. MARKING

It is desirable that the roll of paper be marked on both sides of either the right-hand or left-hand edge with a mark, in the form of a light red dye, 1/4 to 3/4 inch wide and extending approximately 10 feet, within the first 15 feet from the inner end of the roll, to indicate that the end of the roll is being approached.

TABLE A

GENERAL REQUIREMENTS FOR "DATASPEED" PRINTER PAPER

PROPERTY	REQUIREMENTS	METHOD OF TEST
Color	White paper is recommended because it provides the best color contrast for INKTRONIC ink. If a canary (yellow) color is desired, it shall meet the color defined in the 5Y 8.5/4 Munsell notation.	ASTM Designation D1535
Base paper	The paper is made from 100% chemical wood fiber. A spot stain test with phloroglucinol will reveal unwanted groundwood if the stain turns reddish-purple as indicated in the ASTM designation.	ASTM Designation D1030

Note: All physical tests, unless otherwise specified, shall be made under standard conditions of 50 \pm 2 percent relative humidity and 73.4 \pm 3.6 degrees Fahrenheit in accordance with ASTM Designation D685.

TABLE B

PHYSICAL REQUIREMENTS FOR "DATASPEED" PRINTER PAPER

PROPERTY	UNIT	REQUIREMENT		METHOD OF TEST
		MAX	MIN	
Basis weight	Pounds per ream of 500 sheets 17 inches wide by 22 inches long	17	15	ASTM Designation D646
Thickness	Inch	.0035	.0029	ASTM Designation D645
Width	Inch	8-29/64	8-27/64	12 inch scale
Stiffness	Milligrams			TAPPI T451 (m) (Gurley Tester)
Mach. direction		133	89	
Cross direction		66	44	
Bursting strength	Pounds per square inch	—	16	ASTM Designation D774
Tensile strength	Kilograms per 1/2 inch width of paper			ASTM Designation D826
Mach. direction		—	5.0	
		—	2.5	
Chemical acidity	pH	—	4.5	ASTM Designation D778

TABLE B

PHYSICAL REQUIREMENTS FOR "DATASPEED" PRINTER PAPER (Continued)

PROPERTY	UNIT	REQUIREMENT		METHOD OF TEST
		MAX	MIN	
Ash content	Percentage	6	—	ASTM Designation D586
Electrical (surface resistivity)	Ohms	—	10 ⁹	ASTM Designation D257, metal bar or silver paint test procedure. Condition samples per ASTM D202 except the temperature shall be 130 ±6.5°F.

Note 1: References made to ASTM Designations given in this section shall apply to the latest published ASTM Index.

Note 2: Calculated values obtained from analysis or testing shall be rounded off in accordance with the rounding off method given in ASTM Designation E29.

5. WEIGHT

A 16-pound paper should be used. This weight is based on 500 sheets, 17 by 22 inches, with allowable weight variation of ±5.5 percent. The paper should be free of paper dust and lint, and it should consist of a strong, permanent grade of bond paper.

6. THICKNESS

The paper thickness should be no less than 0.0029 inch and no more than 0.0035 inch.

7. CHARACTER OF SURFACE

The paper should have a smooth but not glossy surface of uniform color, free from undesirable amounts of dirt spots and impurities.

8. STRENGTH

The tensile strength when determined on test pieces 1/2 inch wide and 7 inches between the jaws of the testing machine should be as follows. The average of ten tests on samples cut in the paper machine direction should not be less than 3.4 kilograms. The average of ten tests on samples cut at right angles to the paper machine direction should not be less than 1.7 kilograms.

9. STOCK

The paper must be a sulphite sheet one-ply bond white in color, or optionally canary yellow.

10. FASTENING END OF ROLL

The free end of the paper should be fastened to the roll by means of gluing.