



Standard Terminology Relating to Electrostatic Imaging¹

This standard is issued under the fixed designation F 335; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This set of definitions is intended for use by all parties who use, sell, manufacture, test, or develop printer or copier machines so that they will have a common basis for communications.

2. Referenced Documents

2.1 ASTM Standards:

F 221 Terminology Relating to Carbon Paper and Inked Ribbon Products and Images Made Therefrom²

F 1156 Terminology Relating to Product Counterfeiting Protection Systems³

F 1531 Test Method for Comparing Printer or Copier Cartridges²

3. Terminology

3.1 Definitions:

aerosol development—development in which the toner is carried to the field of the electrostatic image by means of a suspending gas.

all-in-one cartridge—(also known as cartridge), a process unit that incorporates all the components, including a photoreceptor, toner compartment and charging devices, used in certain electrostatic imaging devices.

apparent surface resistivity—the surface resistance between two electrodes forming opposite sides of a square on the surface of the copy substrate or the electrical equivalent.

archival quality—the properties of a copy or print necessary to retain specified information under specified conditions of storage, time and use.

background potential—applies only to charged area development process, see **charged area development**. See **residual potential**.

background potential—see **residual potential**.

base stock—see **conductive base stock**.

base weight—the weight of a specified area of paper stock expressed in grams per square metre or in pounds per ream, where the size and number of sheets per ream may vary for each particular grade of paper. Common ream sizes used in electrostatic papers are:

25 by 38 in. by 500 sheets (3300 ft²)

24 by 36 in. by 500 sheets (3000 ft²)

17 by 22 in. by 500 sheets (1300 ft²)

binder—the resinous adhesive component of a pigmented coating composition.

black density—see **image density**.

blasting—haze around a letter, word or image in the form of fine spotting or speckling.

blocking—the tendency for coated sheets to stick together under pressure.

bridging—combination of peaks and smudges that may close or partially close the loop of a character (F 149).

caliper—the thickness of a sheet expressed in millimetres or in thousandths of an inch.

carrier—that substance in a developer that conveys a toner, but does not itself become a part of the image in the finished print. In a liquid developer the carrier may be called a dispersant.

cascade development—development in which dry toner and carrier are drawn over an electrostatic image by gravity.

catcher blade—(also known as a recovery blade or slip sheet), a strip of semi-rigid plastic material that guides the waste toner removed from the photoreceptor into the waste bin.

charge acceptance—the apparent surface voltage present on an electrostatic recording medium immediately after charging.

charged area development—(CAD), a process in electrostatic copying where the photoconductive element is charged with a charge of the opposite sign as that of the toner. A light source is used to discharge all areas on the photoconductor that are NOT to receive toner to form the image. The toner is attracted to the non-discharged areas of the photoconductor when the latent electrostatic image is developed.

charging—the process of establishing an electrostatic surface charge of uniform density on an insulating medium.

¹ This terminology is under the jurisdiction of ASTM Committee F05 on Business Copy Products and is the direct responsibility of Subcommittee F05.01 on Nomenclature and Definitions.

Current edition approved Jan. 10, 2003. Published March 2003. Originally approved in 1971. Last previous edition approved in 1994 as F 335 – 94a (2000)^{ε1}.

² *Annual Book of ASTM Standards*, Vol 15.09.

³ Discontinued, see 2000 *Annual Book of ASTM Standards*, Vol 15.08.