

Paper - Glossary of Terms

There are many terms used when working with paper - here is a selection of some useful definitions:

Acid Free Paper

A paper which does not contain any free acid. Special precautions are taken during manufacture to eliminate acid in order to increase the longevity of the finished paper and to provide a sheet that is suitable for contact with metals.

Antique

A quality bulky paper, particularly opaque, with a rougher surface finish. It can be made in white or in colours, be deckle edged, and either laid or wove. A good printing surface is a feature of this grade which is often used for quality books.

Art Paper

This is a general term for higher quality woodfree coated papers which have a highly polished surface. Today the term is less used because of the introduction of more categories in the sector. However 'real art' is still used for those woodfree coated papers considered to be of the highest quality.

Base Paper

Name given to the base sheet which is intended to be off-machine coated or converted.

Blade Coated Paper

Paper coated by a process in which the freshly applied wet coating is smoothed and the excess removed by a thin flexible metal blade which bears on the coated surface.

Bleaching

A chemical treatment used to whiten, brighten and improve the performance of pulp.

Boards

Term applied to a paper above an accepted weight. The accepted cross-over point from paper to boards varies but in general would be around 180gsm. Below this weight are papers above this weight would be boards.

Broke

Paper, which during the paper making process becomes suitable only for repulping e.g. trimmings or paper that is out of specification. This re-used material which never left the mill is not regarded as recycled.

Bulk

A term applied to the substance, thickness and feel of paper.

Calendered

Paper subjected to smoothing and polishing between stacks of highly polished steam rollers (calenders), which can form part of the dry end of the paper machine.



Cast Coating

A method of drying coated paper by contact of the freshly coated surface with a highly polished chromium plated heated surface. Cast coated papers have an extremely high gloss finish for top quality printing. The finish is obtained by the coating mix solidifying while in contact with the polished surface resulting in a similar polished surface to the paper.

CBS1

Used in bank credit forms Clearing Banks Specification 1 must be 95gsm paper and of determined rigidity, surface smoothness, fold and strength characteristics. It's chemically treated to prevent tampering.

CBS2

Used in bank credit forms Clearing Banks Specification 2 must be an 80/85gsm paper and of determined rigidity, surface smoothness, fold and strength characteristics, with low background fluorescence for OCR readability.

Chemical Pulp

Pulp made by means of chemicals that dissolve the bonding agent, called lignin, within the wood to separate the fibres.

Constat

A contraction of the words 'continuous stationery'.

Cutting to Register

Operation of slitting and cutting watermarked paper so that the watermark design falls in a given position in every sheet.

Double Coating

Coating of paper or board twice on one or both sides.

ECF (Elemental Chlorine Free)

A common definition for pulp bleached without using elemental chlorine. Originally any of the bleaching techniques for chemical pulp, when no molecular (elemental) chlorine is used.

Fastness

Resistance to colour fading.

Gloss

Gloss can refer to the reflectivity of paper itself or of the printed result on it. Gloss of paper is measured by using a Gardner gloss meter, which measures reflected light at an angle of 75 degrees, and is expressed in Gardner gloss units - the higher the number the glossier the paper surface.

Grain Direction

During manufacture the fibres in a web of paper naturally take up an alignment roughly parallel to the direction of travel of the web on the papermaking machine and this becomes the grain direction.

Once guillotined down to sheet form, papers are called 'long grain' if the fibres are parallel to the long edge of the sheet, or short grain if parallel to the short edge.

Grain direction can affect stiffness, folding, creasing and printing characteristics.



Graphic Papers

Papers for printing and writing.

Gsm or gm2 or g/m2

These all mean 'grams per square metre' and are a measure of the weight of a paper. For example if an 80gsm paper was in a sheet size of 1000mm x 1000mm i.e. a square metre one sheet would weigh 80 grams.

Hickey

A spot on a printed sheet caused by dust, lint or ink imperfections; particularly noticeable on solids and half tones.

Integrated Mill

A mill which starts with logs or wood chips and produces wood pulp which it then processes to make paper without intermediate drying.

Ivory Board

High quality board made in white or colours with a bright clear appearance, particularly used for visiting cards and similar high quality printed work.

Lick Coating

A light form of mineral coating, achieved by supplying the surface sizing press of the papermaking machine with coating material instead of normal surface sizing solution.

Lightweight Coated (LWC)

Coated paper below approximately 60 gsm.

Matt Paper

A coated paper with a dull smooth finish.

Mechanical Pulp

Pulp produced using a non-chemical process and instead using a grinding process. Papers made from mechanical pulp often have good opacity and bulk but yellow more quickly than paper produced from chemically made pulp. Newspapers are often printed on papers having a proportion of mechanical pulp.

NCR

An acronym meaning 'no carbon required' referring to a non-carbonless paper originally introduced by the National Cash Register Company but which is now more commonly referred to as carbonless paper.

Neutral Sized Paper

Paper sized with neutral size i.e. neither acidic nor alkaline. Neutral sizing gives the paper enhanced longevity.

Opacity

The extent to which a paper is capable of obscuring matter printed on the other side or on an underlying page. A paper with good opacity is one on which the printing on one side cannot be seen from the other under normal conditions. Usually expressed as a percentage (%).

Papyrus

An ancient writing material made from stems of the papyrus plant. Although the word 'paper' is derived from papyrus, papyrus itself is not paper in the normal sense.



Envelope - Glossary of Terms

There are many terms used when working with envelopes - here is a selection of some useful definitions:

Back Flap

Reverse side of a wallet or banker.

Bang Tail

Special style of wallet, incorporating a perforated flap, extending from the throat.

Banker

Style with an opening on the long edge, and a diamond shape flap. Described as either high cut or low cut depending on the throat.

Basket Weave

Paper with a weave effect finish traditionally used for heavyweight manilla papers.

Blank Fed

Envelope manufacture using sheets of paper.

Bleed

Where the print runs off the edge of the paper.

Board Backed

Generally a pocket style, made with a cardboard back to provide a rigid envelope.

Business Reply (BRE)

A reply envelope with pre-paid postage using a business reply licence. Most often used with business to business mailings.

Chevron Flap

Where the contour on the top flap of the envelope matches the leading edge of the back flap.

Colour Washing

Printing technique used on the inside or outside of an envelope to give a tinted or colour effect.

Constanzia Wallet

A wallet construction, but with the side seams folded on the outside of the backflaps. Used primarily for mailing wallets.

Face

The front of an envelope.

Glassine

Paper based material, used for windows and some photo envelopes

Gumming

A strip of gum applied to the flap that needs to be dampened to help seal the envelope.

Gusset Pocket

An open end envelope with expandable sides.



Kraft

Strong, glazed manilla paper. Also produced in white and bleached kraft.

Landscape

An envelope format where the longest side of the window runs parallel to the long edge of the envelope.

Machine Enclosable

An envelope that runs efficiently through an automatic mailing machine (see mailing wallet).

Machine Glazed (MG)

Smooth finish on one side of the paper, particularly common on manilla paper.

Mailing Wallet

A style of envelope that can be used in an automatic mailing machine.

Mirror Gummed

Remoistenable gum on both the flap and the backflap for extra security.

Multi-Tuck

Pocket with an ungummed internal flap that folds over for security but can be opened for postal inspection.

Opacity

The degree of show through or transparency of the paper, i.e. an envelope with good opacity will not show the contents enclosed.

Opaque

Printed solid, or design inside an envelope for security.

Out Turns

Envelopes that have been taken from the print run and sent to the client.

Overprint

Printing onto already manufactured envelopes.

Pocket

Envelope style with one side or centre seam, a bottom flap and an opening on the short side.

Porosity

The measure of air in the paper that allows absorption of ink. The degree of porosity can affect the quality of the printing, and can also affect the efficiency on some automated enclosing machines.

Portrait

An upright envelope where the long side of the window is parallel to the short side of the envelope.

Post Office Preferred

Series of recommendations for envelopes, set by International Postal Administrators.



Pull-Tab

A cut out strip which can be pulled to reveal a gimmick or open an envelope.

Reel Fed

High-speed envelope manufacturing technique, using reels of paper.

Re-Sealable

Latex gum on the flap and back of the envelope, that gives instant adhesion but can be opened and closed several times for postal inspection.

Score Line

Fold between the flap and the throat of wallets and pockets.

Security Slits

Lines scored on the outer flap of self-seal envelopes only, which split the flap in several places when it is opened. This makes it possible to detect if the envelope has been tampered with.

Security Wash

See Opaque.

Self-Seal

Two strips of latex on the envelope flaps that seal with each other on contact.

Shoulder

Top of the side flaps on a wallet. A critical design aspect for most automated inserting machines.

Side Flap/Seam

Two seams on a wallet/banker, gummed to the back flap.

Superseal

Envelope with self-adhesive flaps, protected by a release strip to give extended shelf life.

Throat

Gap between the score line and the back flap of a wallet. A critical design aspect for most automated inserting machines.

Thumb Cut

Shape cut from a toplless pocket or wallet, to enable easy access to the contents.

Topless

Pocket or wallet style without a flap, although a lip may be left.

Wallet

Envelope style with two side seams and the opening on the long edge.



Part Mechanical

A paper containing up to 50% mechanical pulp, the remainder being chemical pulp.

RA Series

An agreed range of paper sizes.

Examples: RA1 = 610 x 860mm RA2 = 430 x 610mm RA3 = 305 x 430mm

Reel

A continuous length of paper wound on a core, irrespective of diameter, width or weight. Reels can be rewound into smaller reels or slit into coils.

Reel to Reel

A machine on which the material is supplied in reel form and comes off the machine also in reel form.

Runnability

The ability of a paper and board to perform and run through a printing press or on converting machinery without problems.

Self Contained Carbonless

A carbonless type paper which can generate an image itself through the application of pressure. Self contained carbonless papers work without the need for other top, middle or bottom carbonless sheets.

SRA Series

An agreed range of paper sizes.

Examples: SRA1 = 640 x 900mm SRA2 = 450 x 640mm SRA3 = 320 x 450mm

Substance

The weight of paper or board, shown by scales, taken from a sample. The weight is almost entirely defined by grammage per square metre of a single sheet (g/m²).

TCF (Totally Chlorine Free)

Pulp produced without any chlorine or chlorinated chemical compounds.

Woodfree

A pulp or paper which contains no mechanical wood pulp. In commercial practice a small percentage of mechanical fibre is usually acceptable. It does not denote paper or pulp made from materials other than wood.

