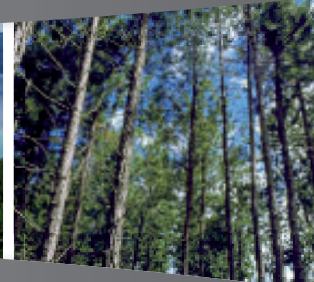
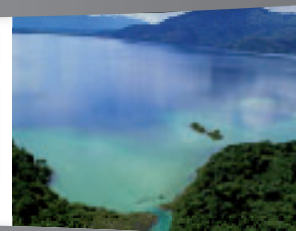
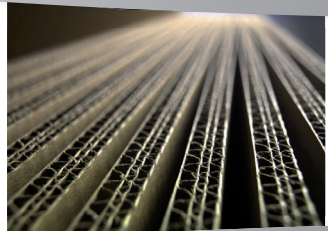


Descriptions of Paper and Board



This fact sheet gives a description for each type of paper and board. A Glossary of Paper and Board Terms is available as a separate fact sheet.

Airmail is a tough, ultra light paper.

Antique is usually a bulky, mould-made paper, good quality with a rough finish.

Two sided art has been coated on both sides with a mixture of white mineral material, such as china clay, and adhesive. This white layer is then polished to a glossy finish by the rolls in a calender (or smoothing machine). Art paper is intended for the printing of illustrations in black and white or colour to give very high quality reproduction of all the varying tones. It could be used whenever such requirements arise for example: greeting cards, hotel and holiday brochures.

Banana Paper is used in two different senses: to refer to a paper made from the bark of the banana plant, mainly used for artistic purposes, or paper made from banana fibre, obtained from an industrialized process, from the stem and the non utilisable fruits. This paper can be either hand-made or made by industrialized machine.

Bank is a thin, rough paper, similar to bond in composition but of lighter weight. Originally the top quality bank papers were made largely from rags. Used as copy papers.

Base paper is paper to which a coating is to be applied.

Board is a generic term which covers heavy duty materials from paperboard and pulp board to paste boards and heavier strawboards, chipboards and millboards.

White Lined Chipboard is a material used for carton making, made up in various layers. The white side, which is made from bleached chemical woodpulp, goes on the outside of the carton and carries the printing; the various grey layers are composed of waste paper. White lined cardboard is extensively used in the manufacture

of cartons for all manner of articles. Tear the board on a cereal or detergent carton and you will see its layered structure quite clearly.

Corrugated Board is made by a conversion process in which three layers of paper (or paperboard) are corrugated during the process and the outer layers (liners) are glued to the peaks, thus making a liner-fluting-liner sandwich. The resultant material is light but strong and is used to make corrugated packaging cases which, because of the strength of the board, can be stacked high.

Packaging Board must score, fold, bend or crease without splitting and have good printability for the process being used.

Bond is a high quality standard business paper, which often carries a watermark. It is available in a variety of colours and is a very strong and long-wearing paper. It is used principally for business forms, letter headings, invoices, statements etc.

Book Paper (or publishing paper) is a paper which is designed specifically for the publication of printed books. Traditionally book papers are off white or low white papers, and are opaque to minimise the show through of text from one side of the page to the other, usually made to tighter calliper or thickness specifications. Different paper qualities are used as book paper depending on type of book. Machine finished coated papers, woodfree uncoated papers, coated fine papers and special fine papers are common paper grades.

Carbonless copy paper is coated on the underside with colourless dye capsules that burst under the pressure of writing or typing and transfer an image to the sheet below by chemical reaction with other colourless dye capsules coated on the upper surface of the second sheet. Some of the uses include invoices, receipts and order forms.



Cartridge (Twin Wire) is a name which arose because paper of this general type was used in the manufacture of shot gun cartridges and because the fibres that make up the sheet start off on two machine wires, each forming a separate web

of paper. The undersides of each web are bonded together while still wet at another part of the machine, to provide a strong, stable paper with two good surfaces, ideal for high quality multi-colour printing.

Coated paper is covered with a suspension of china clay, pigment and adhesive. Various blades and rollers ensure the removal of surplus coating and impart a smooth surface. The coating levels the minute pits between the fibres in the base paper, giving a smooth flat surface for printing. There are a number of finishes available from high gloss, matt, satin and silk. It is used for a wide range of high quality print jobs.

Cast coated gives the highest gloss surface of all coated papers and boards and it is used for labels, covers, cartons, cards or in other display situations.

Gloss coated is usually referred to as gloss art paper. The gloss effect is created by passing the finished coated paper through the supercalender, and is mainly used for colour printing.

Light weight coated is a thin, coated paper which can be as light as 40gsm. It is printed from a reel, in a similar way to the printing of newspapers, but the surface is smoother than newsprint and the paper is generally of much higher quality. It can be used for magazines, holiday brochures, mail order catalogues etc.

Machine coated is a paper that has the coating applied whilst it is still on the paper machine, and is used for all types of coloured work.

Matt coated is a coated paper with a matt finish. It has not passed through the supercalender and therefore the surface is not polished. The relative roughness of the coating prevents light from being reflected and this achieves the matt finish. It is used in all kinds of high quality print work and is suitable for colour printing.

Off-machine coated is a method used to produce all quality coated are papers and boards available today. Jumbo reels of base paper are transferred from the

paper machine to highly specialised coating machines. These are almost as large as paper machines and the coating suspension is applied and dried under computer control.

Construction or 'Sugar' Paper is a tough, coarse, coloured paper. The texture is slightly rough, and the surface is unfinished. Due to the source material, small particles are visible on the paper's surface. The origin of the term sugar paper lies in its use for making bags to contain sugar. It is related to the "blue paper" used by confectionery bakers from 17th century England.

Copier is a lightweight grade of good quality paper used for copying correspondence and documents. The sheet may be glazed or unglazed.

Cotton paper (also known as rag paper) is made from 100% cotton fibres. Cotton paper is superior in both strength and durability to wood pulp-based paper. Certain cotton fibre paper is known to last hundreds of years without appreciable fading, discoloration, or deterioration; so it is often used for the archival copies of important documents. Legal document paper typically contains 25% cotton

Embossed paper has a textured surface. The pattern may be put on one or both sides and common patterns include linen, hammer and sand-grain. Generally used as stationery, leaflets, brochures, etc.

Filter paper is a white paper, made from bleached chemical wood pulp, which has been crinkled and cut into circles. It is used in the household for filtering coffee and is designed to hold back the particles of coffee while allowing the liquid to flow through with relative ease. Other types of filter paper are in regular use, although these are often treated with a resin and pleated before use.

Handmade paper represents a small proportion of the paper production as a whole and is especially used by artists, luxury stationery, and special publications.

Kraft MG (machine glazed) is a very strong type of wrapping paper made from a special type of wood pulp which has been chemically treated. The word 'kraft' is the German word for 'strength'. It is generally brown, although it can be bleached white, and is used to make parcel wrappings, carrier bags etc.

Kraft imitation is not as strong as pure kraft but has similar uses. It is made from waste paper.

Laid is an uncoated paper or board with closely spaced horizontal watermark lines and widely spaced vertical watermark lines. It is used for business and domestic

stationery, letterheads etc.

Machine finished is a paper which is smooth on both sides. It is not as glossy as supercalendered paper and is used for booklets and brochures.

Machine glazed is a paper with one very smooth and glossy side. The other remains rough and can be used for making posters.

Newsprint is used for the printing of national and local newspapers. It is made mainly from wood which has been reduced by mechanical means (it resembles small chippings), and/or recycled waste paper. If you leave it exposed to light, you will see it quickly turns brown, especially near the edges.

Special coatings are used to provide grease, alkali or acid resistance or to reduce the transmission of moisture. Sometimes the coating is single sided, for example a soap wrapper which may have one side treated as an alkali resist and the other prepared to receive the printed image. Used for food wrappings, to wrap scented or greasy products.

Supercalendered has a surface which has been refined by the supercalender rollers, whether on the paper machine or, in the case of high quality art papers, on a separate calender stack.

Tissue Soft is an example of a hygienic paper made from virgin wood pulp and/or recycled paper of good quality - it

contains no sizing and is absorbent. It is made on enormous and very fast running paper machines and is similar to papers made for facial tissues, napkins, paper handkerchiefs etc, or, in a slightly heavier weight, for paper towels.



Tracing paper is a transparent paper produced from very short, specially prepared fibres. The shortness of the fibres means that they do not overlap, as in the normal paper making process, and have to be 'held together' with binders and other materials.

Uncoated paper is a paper which has not been coated. However, it is likely to have been 'sized' so that the surface is not completely absorbent. It is used in stationery and lower quality leaflets and brochures.

Vegetable parchment is a hygienic food wrap used for foodstuffs which are greasy, but may at the same time be wet. It is very like greaseproof paper but the latter is not resistant to moisture and is less of a barrier to grease. A wrapper from butter is more likely to be vegetable parchment. It may also be used to wrap fresh foods in retail shops, package biscuits etc.

Watermarked paper gives a distinctive prestige and is used in high quality papers. During the manufacturing process, an impression is pressed into the paper by attaching a wire pattern or by using relief sculptures to create the desired effect. This process is often used for corporate logos, paper type descriptions, and as a security feature on banknotes, passports, postage stamps, and other documents to prevent counterfeiting.

Waterproof paper is created with special coatings and fibers to allow it to stay together and not change shape or texture when exposed to rain, dampness, or immersed in water. Waterproof paper is popular with military personnel as it can be used in any weather and is tough enough to meet the demands of life in some of the most extreme environments.

Wax paper is made moisture proof through the application of wax, and the practice of such oiling of parchment or paper dates back to Medieval times. The invention of wax paper is often credited to Thomas Edison, although it is thought Gustave Le Gray used a type of waxed paper for photographic negative processing. Today, wax paper is commonly used in cooking, for its non-stick properties, and wrapping food for storage, or in arts and crafts.

Woodfree is a paper that is produced from pulp that has undergone chemical rather than mechanical breakdown and is 'free' of the woody chemicals and materials found in groundwood or mechanical pulp.

Wove Paper is produced using a plain, woven 'dandy roll' and therefore not displaying 'laid lines' - as distinct from laid paper. It is used as a general purpose paper and commonly used for business and domestic stationery.

Writing paper must be a 'sized' paper to prevent the ink from spreading as it does on blotting paper. Obvious examples are stationery, certificates etc.

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