

PAPER INFORMATION SHEET

Paper is a useful and valued commodity. Examples of paper in everyday use include:

- **Communications** - Writing, stamps, newspapers and greeting cards.
- **Health and Living** - Tissues, gift wrapping and food packaging.
- **Business** - Advertisements, money and cheques.

Paper is made from cellulose fibres. The most common source is derived from wood pulp, but other materials include cotton, grasses and sugar cane.

Main types of paper

- Office paper
- Newspapers, magazines
- Pamphlets
- Cardboard
- Mixed or coloured paper



In fact over 50 different grades of paper exist, each grade determining the specific use of the paper.

Coniferous softwoods provide long fibres (3 mm) for manufacturing paper with high strength characteristics. Whereas hardwoods provide short fibres (1 mm) for writing paper and fluting (the middle part of cardboard).

Recycling paper

Paper and cardboard products are 100% recyclable. However they cannot be recycled indefinitely; 4 - 6 times is the maximum because the fibres weaken and shorten every time they're recycled. Virgin paper (paper with no recycled content) may be added to recycled paper during manufacture to maintain strength and quality of the fibres.

Did you know?

For every tonne of paper recycled:

- 30,000 tonnes of water is saved
- Enough energy is saved to power a 3 bedroom house for a year
- 95% less air pollution is caused compared to using virgin wood

What can I recycle?

In theory almost any paper can be recycled; newspapers, magazines, packaging, catalogues, greeting cards, postal mail etc. Although in practice it depends on the recycling facilities provided in your area.

It is important to make sure papers and card are kept separate from food waste as they can become contaminated, which is unacceptable for recycling.

Where can I recycle?

- **Kerbside recycling collections** - All district and borough councils collect paper and card products from the kerbside. But some only collect newspapers and magazines, others collect all types. Please check with your local council for full details
- **Paper banks** - Situated at supermarket car parks and community recycling sites, large containers called 'paper banks' are provided for different types of paper.
- **Household Waste Recycling Sites** - All HWRS in West Sussex provide containers for mixed paper and cardboard recycling.

How is paper recycled?

Waste paper is sorted into different loads depending on its quality and grade. Each load is baled ready for transportation to a paper mill. The process is the same as that used for manufacturing paper from virgin fibres, but because the recovered paper has already been used it must be cleaned and undergoes a number of stages:

- 1. Pulping** - Recovered paper enters a rotating drum called a 'pulper', water and sodium silicate are added. Fibres swell, loosening the ink and then begin to separate.
- 2. Screening** - Fibres are separated from water and any contaminants (staples, plastic, glass etc) removed via screening processes.
- 3. De-inking** - Soap and compressed air are added to the pulped paper. Ink sticks to the soap bubbles forming a surface scum, which is removed.
- 4. Bleaching** - Hydrogen peroxide is added to brighten the fibres.
- 5. Sheet formation** - Pulp is then pumped through a further six cleaning stages and injected into a forming machine to create a 'sheet of paper'.
- 6. Pressing** - The 'sheet' is fed into a press whereby large rollers force water out.
- 7. Drying** - The pressed paper undergoes drying to evaporate remaining water.
- 8. Rolling** - The finished sheet is rolled onto jumbo reels and despatched to printers or board manufacturers.

Depending on the grade of paper being produced quantities of virgin pulp may be added. Although some newsprint and corrugated card can be made from 100% recycled paper.

What does paper get recycled into?

- Top quality printers waste → Printing and writing paper
- Office waste/newspapers & magazines → Graphic paper, tissues, newsprint
- Brown unbleached packaging → New packaging
- Mixed papers/directories → Middle layers of cardboard packaging

