

Fact Sheet



The Case for Corrugated

Number One at the Box Office

Packaging is vital in today's modern society, so the packaging industry is constantly evolving in order to meet the requirements of customers and legislation.

Corrugated packaging is one of the largest sectors within this important industry. In the UK alone, it accounts for almost 30% of all packaging used.

Packaging can be identified as *"the container or wrapping in which a particular item is presented"*.

Its primary purpose is to **prevent damage** to the product through breakage, spoilage, or contamination – all of which leads to wastage.



Packaging can:

- **Protect** goods whilst in transit;
- Be used for **storage & distribution** purposes;
- Provide **information** about the product it contains.

According to industry experts, *"in just one year, manufacturers spent approximately £10 billion on packaging"*.

When every £1 spent on packaging protects at least £9 worth of food and goods, this investment seems a worthy one.

The secondary purpose of packaging is to **provide information**. This can be to advertise and promote the product to consumers, or indicate dimensions and weight of the package. This information can also give consumers instructions on how to use the product or, in the case of foodstuffs, relate to the ingredients and nutritional value. It can alert consumers to potential dangers or misuse of the product it contains.

Packaging can be made from many materials for example paper, glass, plastic, steel or aluminium; each providing their own strengths and capabilities.

However, this factsheet focuses purely on the use of

corrugated packaging, also known as cardboard.

Advantages of Corrugated Packaging

- Strength
- Versatility
- Lightweight
- Recyclability

Boxing Above its Weight

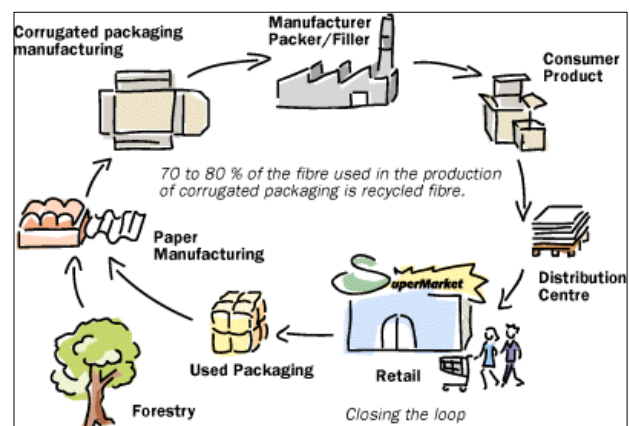
Corrugated packaging is an integral part of society.

Corrugated material has been used as a packaging material since 1871 when an American, Albert L. Jones, first obtained a patent for the use of a corrugated paper for wrapping fragile items such as bottles.

This was a primitive prototype and others developed the initial idea, leading to the first corrugated board in 1882, in a patent awarded to Robert H. Thompson.

The first boxes were produced in the early years of the twentieth century and corrugated board rapidly became the world's favourite packaging material.

Today, through large investment and technological



advancements, much progress is evident, from improved production processes through to innovative printing techniques – all helping to make corrugated a popular choice. Corrugated boxes are made from a high percentage of recycled paper and board

Published by:



1 Rivenhall Road, Swindon SN5 7BD
Phone: 01793 889600
Fax: 01793 878700
Web: www.paper.org.uk

The Case for Corrugated

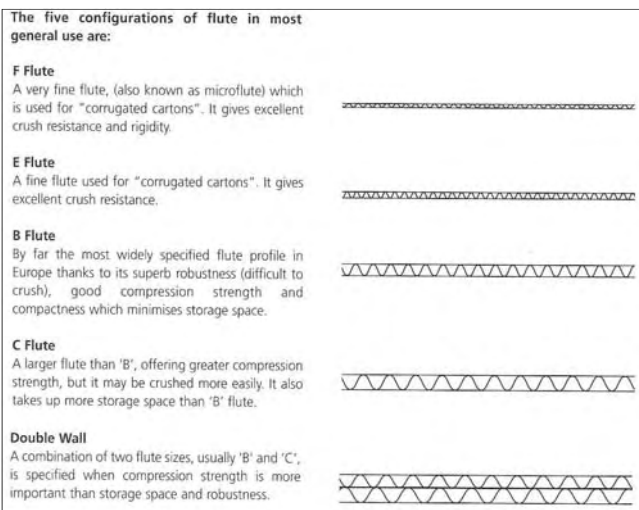
(recovered fibre), typically 75%, which can be material from old corrugated boxes, cartons or newspapers. The re-use of such items means corrugated encompasses a number of environmental benefits.

A Case Study

A corrugator makes the corrugated board from a combination of liners and fluting. This is formed by a set of machines designed to bring together three, five or seven sheets of paper to form single, double or triple wall board packaging.

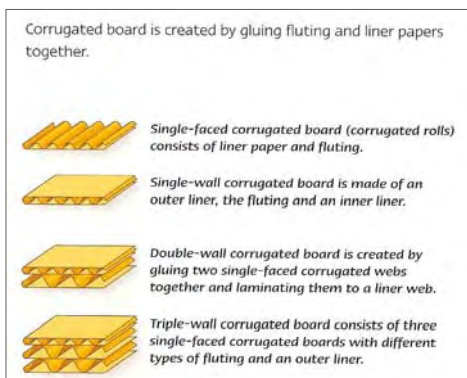
The structure of the final corrugated material is dependent on the way these layers of paper are put together. There are many types of corrugated board each with different flute sizes and profiles which offer many combinations designed to create packaging with different characteristics and performances.

The arch-like structure of the fluting is able to withstand considerable weight by giving rigidity. Any



air circulating within the flutes acts as an insulator, providing good protection against temperature fluctuations.

There are different types of corrugated board. This shows just some of the types currently in use.



Top of the Box

Corrugated packaging works because;

- **Visually**, it can be plain or be printed on in all matter of styles, allowing for individual customer requirements to shine through;
- **Efficiently**, it provides space-efficient packaging that is ideal for transportation, and it breaks down easily;
- **Economically**, it saves the costs of product waste, for instance, when transporting fresh produce, time is the critical factor or the produce will deteriorate and be unusable.

Because manufacturers are continually striving to find ways of protecting their products adequately while using less packaging material, product development is a vital area for those involved with corrugated packaging production.

Recent technological enhancements have widened the variety of applications available to manufacturers in order for them to meet the ever-increasing demands of today's global marketplace. This is not always easy as there are other factors to consider such as environmental issues and legislation, which are affecting corrugated packaging producers.

Once used, corrugated packaging is easy to recycle. In the UK and across Europe, the collection of used corrugated packaging is hugely successful - it is estimated that more than 75% of all corrugated packaging is collected for recycling.

But recovered fibres cannot be recycled indefinitely because fibre length and strength is lost each time the fibre is recycled. This means a constant supply of new fibres is essential to maintain the papermaking chain.

Case Closed

Quite simply, the future for corrugated packaging looks bright.

Corrugated packaging is a prime example of a manufacturer becoming even more successful by listening to its customers. Its ability to perform the basic functions required from packaging, coupled with the environmental benefits of the material itself does much to enhance the popularity of its use.

The way it can adapt means the industry will remain innovative, and that corrugated will always be used as a solution to a multitude of packaging problems.

June 2006