

Corrugated Packaging: Key Facts



Introduction

If corrugated packaging was invented today, it would no doubt be hailed as a miracle product.

Corrugated packaging offers an unrivalled combination of simplicity, flexibility and fitness for purpose.

Packaging – a vital part of modern society

- The main purpose of packaging is to protect goods whilst in transit, storage and distribution. It prevents waste through breakage, spoilage and contamination.
- A secondary purpose is to provide information about the product, and with the opportunities for branding, corrugated really comes into its own.
- Packaging is a good investment. As a result of efficient packaging, product damage in transit remains below 5% in the developed world. In the developing world, damage can be as high as 30% (1).

Corrugated – a very versatile material

- Corrugated remains the most commonly used packaging material in the UK (2).
- Almost all manufactured or farmed items have been packaged in a corrugated container at some point during their lifetime.
- It is a versatile material used for a very wide range of food, grocery and manufactured products.
- Corrugated meets the demands of flexibility and efficiency. It is reliable and simple, and suppliers can provide as few or as many boxes as needed. It can be readily tailored to suit the rapidly changing demands of the supply chain.

- Opportunities for branding reach beyond the conventional brown box intended for behind-the-scenes transit packaging, into a high quality customer focussed pack that provides the brand image central to today's shopping experience.
- For the packaging of fresh produce, hygiene standards are of the utmost importance to the consumer. Corrugated board, being used once and then recycled, offers confidence to both the retailer and its customers.

Packaging and the environment

- The energy used to make the packaging for food is just 10% of the energy in the total supply chain (including growing, transport, retail, freezing & cooking). In other words, the energy for all of these other parts of the supply chain combined is 10 times as significant as that of the packaging (3).
- If a household turned down its room heating thermostat by 2 degrees or drove one less mile a day, it would save as much energy as is used to make the packaging for its whole year's supply of goods (3).

Corrugated - recycling and landfill prevention

- With a recycling rate of over 80%, corrugated has the best UK recycling record of any packaging material.
- This superb recycling rate saves an area the size of Greater London from landfill every four months.
- On average, corrugated boxes made in the UK already contain 76% recycled material (4). Many boxes are made from 100% recycled material.
- The recycling of paper is not a new concept. The UK industry is proud of its recycling heritage that started over 100 years ago.

- There is no need to send corrugated packaging to landfill. In the UK, a wide range of alternative disposal methods exist:
 - recycling;
 - composting;
 - incineration with energy recovery.

Corrugated – opportunities for alternative disposal

- Corrugated packaging is very flexible when it comes to disposal, more than 80%(4) is already recycled but it can also be reused, composted or incinerated with energy recovery.
- Although alternative forms of disposal exist, it is better to recycle paper and board products, making use of, and prolonging the life of, the fibres.



Corrugated – ongoing commitment to decreased use of resources

- This industry has invested in new technology and made a commitment, over many years, to decrease the need for natural resources while maintaining performance.
- Tonne for tonne, corrugated packaging is stronger today than it was 20 years ago.
- As a direct result of actions taken by the industry, the carbon footprint of a corrugated box is continually reducing. FEFCO new cradle to grave carbon impact assessment shows that it has reduced to 491kg CO₂-eq/t (5).

Corrugated - investment and productivity

- The UK Corrugated Industry has become a leaner manufacturing machine following an efficiency drive that has seen productivity driven up 40% in a decade.
- In recent years, almost £500million has been invested in new machinery and equipment.

Paper – a renewable resource

- Paper cannot be recycled indefinitely, as the fibres get weaker each time they are recycled, and need to be replenished. The paper industry depends on a supply of high quality fibres, which come from sustainable sources and is responsibly sourced.
- Forest certification is an ideal way of providing independent validation of this commitment.
- Sustainable Forest Management states that social and environmental criteria have to be met to the same level as economic criteria.
- It is important to remember that the vast majority of the timber from trees goes to construction and furniture making. Papermakers increasingly use the forest thinnings and sawmill waste.

References:

- (1) Source: INCPEN
- (2) Source: Packaging Federation
- (3) Source: Dr Jan Kooijman, provided courtesy of INCPEN
- (4) Source: CERES Logistics
- (5) www.fefco.org

Corrugated Packaging: Key Facts

Revised: May 2023