



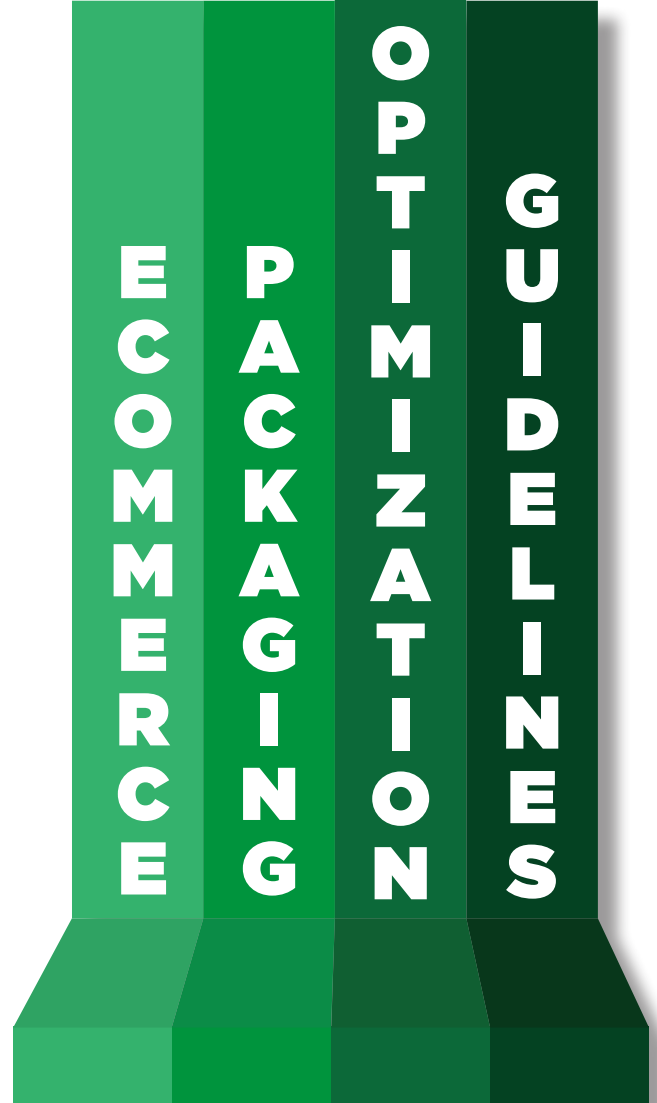
# Ecommerce Packaging Optimization Guidelines

**A simple and easy to understand set of guidelines for Ecommerce packaging**

First published July 28, 2014; revised and updated July 2, 2019

# BACKGROUND

PAC NEXT first published its Ecommerce Packaging Optimization Guidelines in July 2014. Almost 5 years later and it's time for an update as we continue to see considerable growth of Ecommerce consumer packaged goods sales with about 30% of the world's population buying online. In the US, Ecommerce represented 14.3% of total retail sales in 2018. It is estimated that by 2040, around 95% of all purchases will be through Ecommerce. As a consequence, we are seeing considerable effort by brand owners and retailers to re-assess their packaging options to meet consumer needs and the demands of the on-line delivery systems. These guidelines are based on PAC NEXT discussions with member companies and currently available guidelines (see references on page 6).



# CORE GUIDELINES

There are five key criteria that the shipping packaging for Ecommerce deliveries to the home should strive to meet:

1. protect the product and prevent damage and theft;
2. optimize outer packaging size for the product or products shipped – avoid excessive packaging;
3. design where feasible for recycled content, recyclability and re-use (allow for potential return of faulty goods);
4. be easy, convenient and safe to handle and open for consumers; and
5. meet courier specific requirements.

This approach will facilitate delivering packaging material efficiencies, help reduce the environmental impact, and drive cost savings. Also, the primary retail package has a role to play in protecting the product and preventing damage in combination with the outer pack. Additionally, there may be opportunities to consider changes to the retail pack design as the Ecommerce channels grow and mature.

# GUIDELINES

## 1 Protect the product and prevent damage and theft

The fundamental role of the outer package is to protect the product while preventing damage and in-transit theft. Selecting the right outer-pack design (strength) will require both of the following:

- an in depth understanding of the Ecommerce supply chain and the range and frequency of manipulations and modes of transportation as it will be different to traditional distribution systems
- applied experience – learning as the on-line business grows

Also, given the range in size of products and the number of items to be shipped (single vs. multiple), there will be void space that needs filling to prevent contents shifting during transport. Consider using environmentally friendly void fillers. For example, companies such as Dell and Amazon are using bio-mass (bamboo, wheat straw, etc.). Finally, when using tape to seal the outer package, the tape should seal and strengthen the pack and as a secondary opportunity can be used for branding (e.g., Amazon tape).

## 2 Optimize outer packaging size for the product or products shipped – avoid excessive packaging

Even though Ecommerce is now an integrated reality for supply and distribution infrastructure, many companies are still on a steep learning curve as they strive to adapt more products and packages designed for in-store sales to meet on-line purchasing demands. Ideally, packaging should fit the product; however, there are still many examples of excessive packaging where small items are packaged in large boxes surrounded by void materials (e.g., plastic, foam, paper). The challenge here is to find the right balance between the range of outer-pack sizes available and the range of product sizes offered for sale in order to minimize the void space when shipped. Also, consider putting smaller items in a mailer or courier bag rather than a cardboard box. Ultimately, this balance will have to be determined by each company as they consider cost, inventory levels, and complexity of customization, overall environmental footprint and the likelihood of orders appearing to be excessively packaged. Please note that it may well be more environmentally efficient overall to accept that some products may appear to have excessive packaging versus



investing in larger number of outer pack sizes. Remember, too little packaging may lead to product damage and the need to return goods, which will have a far bigger environmental impact compared with over packaging (when taking account of wasted product, packaging, energy to transport and extra handling).

## **3 Design where feasible for recycled content, recyclability and re-use (allow for potential return of faulty goods).**

Ecommerce supply chains are varied and at times demanding and may require the ability to re-use containers to support regular or repeat orders or provide for return of potentially faulty goods. When it comes to recycling, it is important to understand factors that may negatively impact recyclability: excessive printing, incompatible label materials or adhesives, or ancillary items. Regarding recycled materials, it makes sense to use recycled content as per industry norms and material availability. Note the comments on using recyclable and environmentally friendly void fillers.

## **4 Be easy, convenient and safe to handle and open for consumers**

Having succeeded in delivering the product to the consumer, it is a big opportunity in the home to create a memorable experience. The outer pack should be easily opened with ready access to the product and require minimum use of tools (see AOL guidelines). It should also be easy to re-package the product if it needs to be returned, and importantly, it should be obvious how to dispose of the packaging material for recycling.

## **5 Courier specific requirements**

See the reference materials on page 6 with links to courier specific guidelines from DHL, FedEx and UPS.

# SUMMARY

Statistics show that in 2016, almost 91% of internet users browsed, researched and compared products on-line. In 2018, those same consumers purchased \$505 billion worth of products on-line and the growth trend continues upwards. Consumers will continue to expect personal customization of their on-line product choices (range of sizes and shapes) to meet their needs. Moreover, they also expect a great experience after delivery to the home with preferably the right amount of packaging that is easy to open while presenting the product in perfect condition with all of the necessary information. We hope that the above general guidelines and reference materials will help retailers, package designers, Ecommerce marketers and decision makers to deliver a winning on-line package and product experience for their consumers. Ultimately, Ecommerce packaging should be an extension of brands. It should play a key role in conveying what business and products are about and how they can make customers feel.



# CONTRIBUTORS

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# REFERENCES

1. [Amazon Frustration-Free Packaging](#)
2. [DHL Packaging Guidelines](#)
3. [FedEX Packaging Guidelines](#)
4. [UPS Packaging Guidelines](#)
5. [GWP Packaging Guidelines](#)
6. [ShipRocket Definitive Guide to Ecommerce Packaging](#)
7. [Eventige Media Group Guidelines](#)
8. [Canada Post Ecommerce Packaging Guidelines](#)
9. [Purolater Packaging Guidelines](#)
10. [Structural Packaging Sustainability Checklist](#)

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