IS CORRUGATED OVERRATED?

For those of us online shoppers who aren't totally tidy and don't rush off to the recycling bin as often as we should, our homes are filling up with teetering towers of corrugated boxes. We want all the stuff but not all the boxes. It's causing a lot of stressful post-merchandise mayhem.

The container of choice for most e-commerce retailers is the tried and true (and big and bulky) corrugated box. No matter the size and type of product that was ordered online, most companies will construct and pack a box in which to send that item to our house. This fulfillment choice leads to the corrugated graveyard in our garages. The journey from an online click to a pile of boxes now constitutes the circle of e-commerce life.

Though we can order what we want and pretty much get it as fast as we want, we still have no control over the packaging used to send the products to our homes. We're stuck with whatever the shipper sends us.

Corrugated vs. Cardboard

It's important to note that corrugated differs from cardboard. Though many people refer to the cartons that transport their online purchases as "cardboard boxes," the two words are not synonymous. It's actually corrugated material, because of its strength, that's used to create shipping boxes.

Corrugated consists of three layers of paper – one layer of fluting (the wavy part) between two smooth layers. Corrugated is most often used for shipping boxes, pizza delivery boxes, and point-of-purchase retail displays. Cardboard is made from heavy paper pulp and is used to make cereal boxes, greeting cards, and board games.

Not All It's Cracked Up to Be

Traditionally, corrugated has been a good choice for small parcel shipments. It's accessible, durable, versatile, and sustainable among other things. It's easy to see why so many companies keep using it, even though alternatives might be more beneficial to a company's finances and customer experiences.

These days, there a quite a few downsides to using corrugated, which along with the myriad demands of e-commerce, have been pushing companies to rethink the old fashioned box.

- One of the most important factors in reconsidering corrugated is cost. As reported in the *Boston Globe*, prices have surged for the raw materials used to make most boxes (known in the industry as old corrugated containers or OCC).

- Corrugated can be quite the space hog. Not only does the material take up a lot of room in our homes, it takes up a lot of valuable square footage in warehouses and fulfillment centers where most e-commerce orders are packed and shipped.

- Boxes have been taking up so much space inside delivery trucks that two years ago, major carriers such as UPS and FedEx implemented dimensional weight pricing to cut down on package size. The new pricing is based on volume versus actual weight so a big box will cost more to ship no matter how light it is.

- One box size does not fit all. To avoid storing a range of box sizes in warehouses, which is a good idea in theory, companies use just a few sizes for all products which leads to excessive void-fill materials filling up empty space inside oversize boxes. All this extra plastic, foam, or paper frustrates consumers. A consumer survey conducted by Sealed Air revealed 47% of Americans feel that extra packaging is wasteful.

- Boxes waste time. The slowest part of fulfillment operations is almost always packing because manually interacting with boxes is labor intensive. Workers must shape, erect, and tape the box to get things going. Then, items and documentation have to be placed inside the box and ultimately the box is taped shut and a shipping label is adhered.

It's Time to Rethink the Box

Some traditions are made to be broken. Though many companies of all sizes suffer from corrugated box inertia, alternatives to outer boxes are available and can improve business and customer experience.

- There's no need to send a box when a shipping mailer will do. Mailers are now stronger and more protective than ever and are suitable for a wider range of products. Automated, custom-sized polyethylene mailers have proven to be the perfect solution for apparel and other soft goods. An added benefit to mailers is, unlike boxes and other rigid containers, mailers can often be placed inside mailboxes rather left on doorsteps.

- In cases where a product's primary package is sturdy enough such as dry goods that have an effective outer package or consumer packaged goods that are sold off the shelf in heavy cardboard boxes, a corrugated box isn't needed at all. Instead, an opaque, durable plastic film can cover the original package. When applied, the film shrinks and adheres to the dimensions of the product.

- Some products just require a box (not that there's anything wrong with that). Corrugated is the lowest-cost rigid shipper that exists, and that rigidity has an important role in the marketplace. But that box must be cut to the right size for each order. Right sizing can be done with automated equipment which will speed up the packing process, eliminate waste, avoid dimensional weight, and make labor more efficient. The machines give companies more flexibility to use labor in ways that will drive efficiencies.

Bye, Bye Box

Boxes will probably never fully go away but as e-commerce continues to evolve and more R&D efforts are put into developing alternatives to corrugated, new options will keep coming on the market. Boxes are slow and hard. It's time to ship smaller, safer, and smarter.