

The E-commerce Modular Box

In recent years, the e-commerce industry has been ever growing and so has the list of problems they encounter. The e-commerce box is a problem that has plagued the industry since the beginning. With so many different products being shipped out every day, finding a unique box to fit each and every one is challenging. The common solution is to generalize a few different box sizes and fill in the gaps with some sort of slack fill or dunnage. Our modular box is designed with the intention to fit all sorts of different shapes and sizes but does not require the slack fill. This new design does not negatively impact the end consumer, as they open it the same as a typical e-commerce box and dispose of it in one piece.

Our e-commerce box provides protection from all six sides. The minor flaps on both the top and bottom of the box interlock at several different locations to provide structure to the packaging. While the top and bottom of the box are less modular, minor changes to height as well as extra cushioning are provided from the flaps wrapping around the product. This design can also be used to make multiple distinct sections to ship multiple products simultaneously, potentially cutting back on the number of packages being shipped.

A switch to this modular design brings many benefits to the e-commerce industry. By not having any form of insert or slack fill, inventory is reduced, and forecasting considerations becomes significantly easier. This design also encourages sustainable practices by being 100% fiber based and only taking up the same blank size as a standard FOL case. Strength is not compromised in this design, and is actually improved due to the modular framing.

The current iteration of this packaging is 12x6x6 inches and is B flute. We recognized these dimensions to support a wide range of smaller items, as well as falling within Amazon's frustration free packaging requirements. The B flute provides additional padding and stacking strength for potentially fragile items. These aspects of the box can be changed though, future implementation of this design will allow for many different flutes, and many different dimensions depending on the need of the business.