What do you mean “cardboard” doesn’t exist?

To most of us, “cardboard” generally means a brown box that’s used to deliver stuff to our homes or workplaces. This word image is reinforced by recycling bins parked at strip malls with the word “cardboard” painted in big letters on the side, and by municipalities reminding their residents not to forget to put their “old corrugated cardboard” out to the curb. There is absolutely nothing wrong with effective communication to a target audience. And there is a reasonable argument to be made that the general public really doesn’t need to know any more, that there is enough clutter out there already. They know what a cardboard box is.

At the same time, however, use of the word cardboard creates confusion. For technically cardboard doesn’t exist. The box we are talking about is either a corrugated box or it is a boxboard or paperboard carton. What’s the difference, and why does it matter?

A corrugated box is made from strong paper fibres, primarily because it is used as a shipping container designed in most cases to deliver many similar products. It comprises several layers of paper fibre to give it that strength: a top and bottom layer (called linerboard) and a middle layer (called corrugating medium). The wavy, ripple-like shape of the medium in the middle gives the box its strength. Think of the Roman arch, or a corrugated tin roof. A corrugated box always has this ripple layer in the middle.

A boxboard or paperboard carton, on the other hand, does not require the same strength properties as a corrugated box because it normally holds only a single item. Here’s a good example to illustrate the difference. A cereal box is made from boxboard or paperboard, but 20 or 30 or more cereal boxes were delivered to the retailer in just one stronger corrugated box.

To the general public, both box types are simply cardboard. Why does the difference matter? It matters to recyclers who wish to turn the used “cardboard” into a new paper product. Like a chef, they need to know the properties of their various ingredients. They need to mix and match paper fibre strengths to be certain that whatever new product they are recycling it into, works. Too many thin used fibres by themselves might not be strong enough. So it’s important for recyclers to know how much of that bale of “cardboard” for recycling is actually corrugated (or old corrugated containers, OCC) and how much is old boxboard (OBB). They need to get their furnish (or recipe) right.

Making the distinction between corrugated and boxboard is also important from a waste management policy perspective. Lumping corrugated and boxboard into one category called cardboard in waste
audits and other data gathering exercises makes it a lot harder to determine actual recycling rates and to target recovery efforts at specific waste paper streams.

So when you go home tonight, or if you are already at home, check out that brown box in your basement, garage, kitchen. And remember, it ain’t cardboard!