



## Williams-Sonoma

Williams-Sonoma, Inc. is a major retailer of housewares with several retail formats, the most prominent being Williams-Sonoma and Pottery Barn. The company has more than 500 retail stores and also conducts a major catalog and Internet sales operation. This case study highlights selected packaging waste prevention and reuse measures undertaken at its Portland (Oregon) retail store, as well as company-wide changes made in retail operations and order fulfillment.

### Retail Operations

*Box scoring.* While all catalog and Internet orders are processed by a central order fulfillment center, if a customer visits a store and purchases a gift for a friend or relative out of town, the gift may be shipped from the store.

Box scoring is a method of reducing the amount of empty space and associated void fill materials. Scoring involves cutting down the seams of the carton and folding the sides over the top. In addition to reducing void fill use, box scoring also reduces the overall “cube” of the outbound carton, which has environmental benefits during transport as more boxes can fit in a truck.

Williams-Sonoma encourages retail stores to score boxes by providing master cartons that are pre-scored. Seven of the nine cartons made available to stores are pre-scored at multiple heights. For example, the 20x15x15 carton is pre-scored to 13, 11, or 9 inches in height. Employees can score boxes to other heights as well.

The Portland store routinely scores outbound boxes. During one day when the impact of scoring was evaluated, box scoring was found to reduce the quantity of void fill used by 40%. The estimated financial benefit in reduced void fill use alone was \$1,700. If the Portland store is typical of other Williams-Sonoma stores, company-wide savings from box scoring are approximately \$400,000 per year.

For more information on box scoring, [click here](#).

*Void Fill Reuse.* The standard void fill currently used at Williams-Sonoma stores is a perforated paper product called Geami. However, expanded polystyrene is used for returning products to vendors as well as occasional shipments of highly fragile items. The Portland store purchases no expanded polystyrene whatsoever. Instead, it relies entirely on loosefill provided by vendors in inbound shipments.

*Smaller Boxes.* An evaluation of outbound shipments at the Portland store several years ago revealed that carton sizes were not necessarily optimized. The corporate office subsequently expanded the number of different box sizes from six to nine, changing the sizes of some boxes and adding a smaller box. Previously, the smallest box was 12x12x8 inches. It was replaced with a 10x8x8 inch box (with pre-scoring at 6 and 4 inches). Similarly, the 14x14x14 box was replaced with a 14x14x6 box.

Smaller boxes tend to cost less, require less void fill, and also may result in lower outbound freight costs. However, savings from this change are very difficult to estimate. According to one estimate, the introduction of the smaller box alone is expected to reduce procurement and shipping costs (across all Williams-Sonoma stores) by \$31,000-\$78,000 annually.

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*Reduction in Double-Bagging.* Retail stores have several different sizes of shopping bags. Most are paper, although a large plastic bag is also available. One of the most commonly used bags is called the “Downtown Shopper”. It is the largest of the paper bags and is typically used for larger – and heavier – items, such as kitchen electronics and dish sets.

Discussions with retail staff at the Portland store revealed that the Downtown Shopper was also the most likely to be double-bagged. Bags were doubled-up at customer request, or when particularly heavy items or items with sharp or protruding edges were placed in them. During the rainy months, which include the busy holiday season, practically every Downtowner was double-bagged, according to store associates.

The corporate office’s solution was to make available to the stores a bag insert, sometimes called the “bag bottom.” The bag bottom is a rectangular piece of chipboard that fits snugly into the bottom of the Downtown Shopper. It reinforces the bottom of the bag and helps to redistribute weight more evenly. A bag bottom costs 84% less than a bag, so each time a bag bottom eliminates the need for double-bagging, money is saved. The same is true from a waste and materials perspective: the bottom weighs 66% less, and is mostly unbleached (with a thin bleached layer), whereas the bag itself is made from bleached kraft.

Originally, the bag bottoms were made available as an “extra” that stores could choose to purchase. The corporate office considered promoting the bag bottoms to the stores as a method of reducing double-bagging but eventually settled on a different solution: including bag bottoms with every shipment of Downtowner bags. The idea is that if the stores don’t have to remember to order the bag bottoms, and have them in inventory automatically, they’ll be more likely to use the bottoms and thus less likely to double-bag.

The benefits of this strategy have not been formally evaluated, in part because of the difficulty of tracking the frequency of double-bagging. Anecdotally, interviews with store associates in Portland suggest that the bag bottoms are very useful and that the frequency of double-bagging has fallen from 75% to 25%. This results in a reduction in packaging production of roughly 5 pounds – and financial savings to the store of about \$8 – for every 100 times a customer leaves the store with a Downtown Shopper bag (even when the weight and cost of the extra, unused bag bottoms is factored in). Extrapolated to all Williams-Sonoma retail stores, potential savings are more than \$230,000/year and reductions of 50 tons of packaging material/year.

Catalog/e-commerce order fulfillment

*Promote Expanded Polystyrene Reuse.* Many mailing companies will accept expanded polystyrene loosefill “peanuts” for reuse. The Plastic Loosefill Council’s “Peanut Hotline” (800-828-2214 and <http://www.loosefillpackaging.com/search/default.asp>) identifies more than 1,500 locations in the U.S. that accept loosefill from the public for reuse.

Williams-Sonoma’s direct-to-customer order fulfillment center encourages catalog and internet customers to reuse polystyrene loosefill by printing the following message on the inside of its cartons.



**Alternative formats** (such as large type, Braille) of this document can be made available. Contact DEQ’s Office of Communications & Outreach, Portland, at (503) 229-5317