

COLLABORATION AN INVALUABLE ASSET IN HELPING THE WORLD BANK RECYCLE OLD CEILINGS RATHER THAN DUMPING THEM

A cooperative effort between manufacturer, distributor, contractor and customer allows the World Bank to reclaim 50,000 square feet of old ceiling tiles a year

A unique collaboration between manufacturer, distributor, contractor and customer is helping the World Bank recycle 50,000 square feet of old acoustical ceiling panels per year rather than depositing them in a landfill. And, by doing so, the Bank is living up to the environmental stewardship it expects of itself and its member countries.

Headquartered in Washington, DC. The World Bank is not a “bank” in the common sense of the term. It is one of the United Nations’ specialized agencies, and is comprised of 184 member countries, all of whom are jointly responsible for how the institution is financed and how its money is spent. One of the bank’s primary functions is to provide long-term, low-interest loans to developing countries. As part of its mission, it also seeks to ensure environmental sustainability for people worldwide.

A Strong Commitment to the Environment

Luis Descaire, Director of the World Bank’s General Services Department, is responsible for managing the Bank’s internal environmental programs. Descaire explains that the World Bank puts a strong emphasis on the environment and its own environmental activities. “Our senior management is very committed to it,” he says. “After all, we often advise governments on environmental measures. If we can’t practice what we preach, how can we expect our borrowers to do so.”

As one manifestation of this philosophy, Descaire notes that the Bank’s Corporate Procurement unit is now including stronger greening language in all World Bank contracts. “We’re also encouraging our vendors to develop environmental programs and practices of their own that we can support,” he adds.

The ceiling recycling program now underway at the World Bank headquarters is a recent example of a vendor-generated program that was embraced by the Bank. “This is exactly the type of innovative program we want to implement as part of the Bank’s Greening Program,” Descaire states, “especially because it fits in so well with our overall environmental initiatives.”



The Armstrong Ceiling Recycling Program allows the World Bank to reclaim old ceiling tiles from office space that surrounds the central atrium as shown here.

Offers Alternative to Landfill Disposal

The World Bank headquarters encompasses four buildings in Washington, DC and houses nearly 8,000 employees. During the course of an average year, about 50,000 square feet of old acoustical ceiling tiles are removed and replaced. In the past, the tiles were thrown into a container and eventually taken to a landfill for disposal. Today, those panels are finding new life as a result of the ceiling recycling program.

The program, which is the only one of its kind, is offered by Armstrong Ceiling Systems, the country’s largest manufacturer of acoustical ceilings. It enables commercial building owners to ship old ceilings from renovation projects to an Armstrong ceiling plant as an alternative to landfill disposal. The company uses the old tiles as raw materials in the manufacture of new acoustical ceilings. Over 16,000,000 square feet, or 10,700,000 pounds, of discarded ceiling tiles have been recycled since Armstrong began the program.

To participate in the program, a building owner or contractor must first verify that the old acoustical ceiling panels can be recycled. The old ceilings do not have to be Armstrong products to qualify. Following verification, the owner or contractor must then stack the old ceiling tiles on pallets and wrap them for pick-up. Once there is a full trailer load, or 30,000 square feet of old ceilings, Armstrong will arrange for a truck to pick up the material and transfer it to its nearest manufacturing facility.

case study

Cooperative Effort Solves Storage Problem

The World Bank learned about the ceiling recycling program from Joe Matthews, a vice president with Centennial Contractors Enterprises, a construction management firm that specializes in the performance of indefinite-delivery, indefinite-quantity (IDIQ) contracts for institutional, government and commercial clients. Based in Vienna, Virginia, Centennial has been managing the World Bank's building maintenance and alteration services contract for the past ten years. It has a dedicated office, headed by Matthews, that is located at the World Bank.

Initially, Matthews believed the program might not be feasible because of the need to store 30,000 square feet of ceiling tiles at the job site before Armstrong could come and pick them up. However, working in conjunction with the ceiling distributor, Capitol Building Supply, and the local Armstrong representative, Centennial and the World Bank were able to implement a plan that allowed the program to work.

According to Matthews, the first key was finding room to create ceiling recycling collection "centers" in each of the Bank's four buildings. In this case, the Bank's facility management team proved invaluable. Once they were informed of the purpose of the areas, they quickly identified space and allocated it for the program.

As a result, each of the buildings now has a "Recycling Room" designated as a collection point for both ceiling tiles and carpet tiles, which are also being recycled. Each of the areas contains a 4' wide x 4' long x 6' high "U" shaped material handling bin for stacking old acoustical ceiling tiles onto a pallet as they are replaced.

Distributor Stores Old Tiles Until Pick-Up

The next key was the shipment of the collected tiles to Armstrong. "The World Bank facilities only have a finite holding capacity," Matthews explains. "As a result, we couldn't store the tiles there for any length of time."

It was at this point that Capitol Building Supply became involved. Working in conjunction with Les Richardson, Centennial's Purchasing Manager, and Doug Oyler, the local Armstrong sales representative, a plan was developed to transfer pallets of used tiles to a Capitol warehouse first, and then to the Armstrong plant.

As Tony DiGuseppe, Capitol's inside sales representative, explains, "Our trucks are constantly making deliveries to the World Bank. However, instead of returning empty, we now load them with pallets of discarded ceiling tiles and bring the pallets back to our warehouse, where we store them. Once we've collected 30,000 square feet of tile, we call Armstrong, which then arranges for a truck to pick them up and deliver them to its manufacturing plant. In many cases, it's a truck that would have previously delivered material to our warehouse and returned empty. The loop is then closed when we deliver new ceiling tiles containing recycled content to the Bank and they are installed."

Ceiling Recycling Part of Broader Vision

The ceiling recycling program at the World Bank is working quite well, but as Matthews notes, it is only part of a much broader picture. His personal vision is to see that sustainability initiatives like this one ultimately affect a positive change in the ways people approach the environment. And, he foresees that happening in two ways: By embodying green thinking in everything people do throughout the value chain at every level within every organization, and, through synergetic efforts, by identifying new ways of thinking that recognize the balance between economic and environmental concerns.

Matthews' commitment to the environment is also such that he is more than willing to share his and his company's experiences. "Small renovation projects like ours are constantly going on in the Washington, DC area as well as the rest of the country," he notes. "Others in the construction community need to learn to not be threatened by their sense of competitiveness. We need to work together as an industry to make meaningful progress toward improving our environment."



Following removal, old ceiling tiles are stacked and stored at the World Bank facility prior to pick-up by Capitol Building Supply, the ceiling distributor. Recyclable carpet tiles are seen on the left.