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# case study

## **RENOVATIONS AT SUN LIFE PLAZA IN CALGARY FEATURE FIRST CEILING RECYCLING IN CANADA**

*As Part of Recent Renovations, Sun Life Financial Reclaimed 250,000 Square Feet of Old Ceiling Tiles Rather Than Dumping Them in Landfills*

Nearly 250,000 square feet of old ceiling tiles from the Sun Life Plaza office towers in Calgary are finding new life.

The reason: Sun Life Financial, the towers' owner and manager, is the first building owner in Canada to take advantage of a unique, recently introduced ceiling recycling program.

As a result of the program, more than 160,000 pounds of old acoustical ceiling tiles, or enough tiles to fill 62 large 20-cubic-yard construction containers, have now been diverted from landfills, helping Sun Life Financial fulfill its corporate commitment to protect the environment.

Located in downtown Calgary, Sun Life Plaza was constructed in 1982 and consists of three 28-floor towers housing a total of approximately 1.3 million square feet, much of which is devoted to office space for oil and gas companies.

Nearly 250,000 square feet of that office space was recently renovated for the purpose of updating it, not just for new tenants, but existing tenants as well. As part of the renovation, the 20-year-old acoustical ceiling panels were removed and replaced with new panels.

### **Program Offers Alternative to Landfill Disposal**

In a renovation project of this type, the old suspended ceiling panels would normally have been removed, thrown into a roll-off container, and eventually hauled to a landfill for disposal. In the case of Sun Life Plaza, however, the old panels are finding new life as a result of a unique ceiling recycling program offered by Armstrong Ceiling Systems, the world's largest manufacturer of acoustical ceilings.

The program, which is the only one of its kind, enables building owners to ship old ceilings from renovation projects to an Armstrong ceiling plant as an earth-friendly alternative to landfill disposal. As part of the program, the company even pays freight costs for shipping the old ceilings, which it uses 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.

Scott Perron, Operations Manager at Sun Life Plaza, explains that he learned about the opportunity to recycle the old ceiling tiles during the purchasing process. "The local Armstrong representative informed us that the Ceiling Recycling Program, which has been in operation in the U.S. for a number of years, was now being offered in Canada as well.

"Sun Life is very proactive when it comes to the environment," he continues. "The ability to recycle old ceilings is much more environmentally responsible compared to the traditional dumping process, and was very attractive to us."



The Sun Life Plaza office towers in Calgary are the site of the first Armstrong ceiling recycling project in Canada. Nearly 250,000 square feet of old tiles were reclaimed.

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## Ceiling Recycling Program Requires Three Steps

The program involves three steps. First, the building owner or contractor needs to verify with Armstrong that the old ceiling tiles can be recycled. The old ceilings do not have to be Armstrong products to qualify for the program. In the case of Sun Life Plaza, the old 20"x 60" ceiling panels were found to be recyclable and thereby eligible for the program. They were replaced with new Cortega™ ceiling panels from Armstrong.

Following verification, the owner or contractor must then stack the old ceiling panels on pallets and package them for pick-up. Perron notes that at Sun Life Plaza, the removal, stacking and palletizing of the old tiles is part of the demolition contractor's job scope.

"We included the work involved in removing and preparing the ceiling tiles for recycling in the contract," he says. "However, we supplied the pallets and also taught the demolition crews how to stack the tiles according to the Armstrong specifications. The crews quickly bought into it, and accepted the process very well."

Once there is a full trailer load, or 30,000 square feet of old ceilings, the owner or contractor simply needs to contact Armstrong, which will then arrange for a truck to pick up the material and transfer it to its nearest manufacturing facility. The ceiling panels from Sun Life Plaza were shipped to the Armstrong plant in St. Helens, Oregon.

## Ceiling Recycling Less Costly Than Dumping

Perron notes that the process for recycling old ceilings proved to be nearly as fast as dumping them. "It does take a little longer because there is some additional handling involved, but not enough to have any adverse impact on the demolition or renovation schedule," he states. He also notes that the crews preferred to metal band the stacked panels rather than shrink wrap them. "This worked better for us, and helped make the entire process pretty much worry free."

When it comes to cost, Perron points out that recycling the ceilings turned out to be less costly than dumping them. "Compared to the total cost of handling, transport, container fees and landfill fees, we were actually able to save some money by recycling," he states. "However, that was a bonus, because the cost savings were not the driving force that drew us to the program...it was the environmental benefits."

Sun Life Plaza in Calgary is the first Sun Life Financial property to recycle old ceiling tiles. However, Perron feels it won't be the last. "I believe other Sun Life buildings around the country will soon follow," he states. "And," he adds, "as long as a renovation project is large enough, we'll continue to recycle ceiling tiles here in Calgary."



Pallets of old, discarded ceiling tiles at Sun Life Plaza await pick-up by Armstrong, which will use them in the manufacture of new acoustical ceilings.