

## Energy Saving Products Ltd. – Building a Better Building

Edmonton, CANADA - Energy Saving Products Ltd., manufacturer of Hi-Velocity Systems, has unveiled its brand new 23,000 square foot facility, on the site of the arson that completely destroyed the building and its contents on January 27th, 2009. The Hi-Velocity System is a small duct heating, air conditioning and indoor air quality system, manufactured since 1983.

CEO Leon Prevost was in Chicago attending the AHR Expo in January 2009 when he got a phone call from his wife (ESP President Elaine Prevost) telling him of the late night fire. Although devastated, Leon's determination set in, and he began immediately to look forward. "I was not going to let this tragedy get us down" he said.



January 27th, 2009

With great resolution and a lot of hard work from employees, suppliers, customers, friends and family, the company was up and running in a temporary facility within two and a half weeks of the fire.



Energy Saving Products Ltd.

The design of the new building was completed by Leon and his sons (Tim, in Technical Support and Training, and Daniel, in charge of Electrical Research and Development), working closely with the General Contractor on the reconstruction of the new manufacturing plant. "We came up with our own plans from the start of the design to the finish," says Daniel. "We wanted practical energy-efficiency, and of course we also wanted to showcase our Hi-Velocity System for everyone visiting the factory." As a result, ESP has introduced a much improved training area to better instruct customers and showcase their products.

The company has invested 22 months to build a leading edge manufacturing facility, which will be certified under the LEED (Leadership in Energy and Environmental Design) program. This program encourages the adoption of sustainable green building design techniques and construction practices, through the creation and implementation of universally understood and accepted tools, materials and performance criteria, pertaining to all aspects of the building. "The whole idea behind LEED is not only energy efficiency, sustainable design or indoor air quality (IAQ), but also an overall improvement of construction practices to reduce waste and/or contamination caused by the construction process," said Daniel. "The new factory reduces our energy usage by 60 percent."



Mechanical Room featuring Hi-Velocity System Products

High-efficiency chillers, boilers and solar panels were also included in the new plans. For Leon, "it was only natural to go to the next level of sustainability."

The warehouse and office space are outfitted with multiple air handling systems with numerous zones allowing each occupant to control the temperature in their own space. This promotes productivity, comfort and well-being, as well as demonstrating a fully energy efficient system.

Each air handling unit utilizes a heat recovery ventilator (HRV). These recover thermal energy from the air being exhausted and transfer it to the fresh air being brought into the building. This will save energy by minimizing the heating load in the winter. Each air handling unit also uses the company's own HE PS air purification system, which utilizes

photo-catalytic technology to eliminate VOC's, CO, and odours from the air. The air handling units are also equipped with CO2 (Carbon Dioxide) monitoring sensors that modulate the amount of fresh air and exhaust air to provide the building with optimal indoor air quality.

Another renewable energy system being incorporated in this building is a solar collector system to supply supplementary heat to the building and hot water tank. These are constructed of a bank of tubes that absorb thermal energy from the sun and exchange this heat to water flowing through the tubes. This is done to reduce the load on the boilers and take advantage of our planets free energy.



New office space with individual thermostats and dampered outlets



Elaine, Tim, Leon, and Daniel Prevost

“We look forward to our Grand Re-opening in May, and greeting existing customers as well as welcoming new customers,” said Leon. “Now, we not only talk the talk on efficiency and sustainability, but also walk the walk and lead by example.”

What began as a disaster has turned into a new vision. ESP offers it's customers a solid core of youth tempered with age and experience in their combined commitment to improve and develop the Hi-Velocity System.

New Building Video on YouTube