



Featured Ice Rink

## City Center Park

*At City Center Park, form meets function where the real winner is the environment. This innovative ice rink-splash park wins an international design award and costs less than \$10.00 per day to operate*



This month's feature rink is an outdoor skating rink-splash pad in the forward thinking town of Langford, British Columbia on Canada's Vancouver Island. With over 40 ice surfaces, skating rinks are nothing new to Vancouver Island. As a matter of fact, the very first refrigerated ice surface in Canada was built there by the famous Patrick hockey family in 1911. On the other hand, due to the very moderate climate, there has never been a permanently piped outdoor ice surface prior to the City Center Project



During the conceptual design stage the Mayor and council liked the idea of an outdoor ice rink but felt that it would limit the use of valuable city land to winter time only. Mayor Young, known for thinking outside the box posed the question, "Can the same footprint be used for an ice rink in winter and a splash pad in summer" In contacting Accent Refrigeration Systems who were the designers for the communities existing indoor ice facilities, the mayor was assured it would be no problem as we have already designed two ice rink-splash pads with similar requirements.



One of the mandates given for the City Center Project was it had to be very efficient as Langford wanted to set the standard as a LEED community. When a client tells us they want efficient, they are now playing in our backyard. Let's go to the drawing board. With 42 drains and spray appliances great care had to be taken to ensure that there were no soft spots or parasitic heat transfer between the ice surface and soils below the concrete pad. Specially fabricated conductor fittings had to be installed on all of the spray appliances to ensure a monolithic ice quality.

Just about every page was pulled from the Ice Rink Energy Efficiency Manual. An oversized enhanced surface chiller was installed along with a condenser large enough to ensure low compression ratios no matter what the ambient conditions. Variable speed drives were installed on the highest rated premium efficiency motors that were available. At the heart of the system, was a prototype ultra efficient compressor never installed on an ice rink anywhere in the world! The new compressor, with a Coefficient of Performance 18% higher than any compressor previously employed also had the benefit of minimal long term maintenance costs. The system has been designed to recover 100% of its waste heat for use in a district energy sharing loop for a new housing development that has been under construction 300 yards away. Once the ice was in we had to protect it from the harmful effect of solar gain. True White paint by WHITE-ICE™ was selected for its excellent ability to reflect the sun's intense radiant energy.

In recognition of the exemplary initiatives taken, the project was presented an international award for innovation in design. The award presented by the International Parks and Recreation Association marks the first time a British Columbia City has taken the coveted award in close to 15 years. Over 300 cities and organizations compete for the award on an annual basis.

Accent Refrigeration Systems are world leaders in Ice Rink Construction, Energy Efficiency and Heat Recovery. We have over 50 valuable applications for your waste heat. If you are planning on building a new ice facility or would like to improve the operation of your existing facility, give us a call and we would be glad to work with you to make your facility efficient and profitable.

**Accent Refrigeration Systems**

**Phone (250) 478-8885**

**[www.accent-refrigeration.com](http://www.accent-refrigeration.com)**

