Sprung Structures

A Better Way To Build

Rapid Construction. Design Flexibility. Performance & Durability. Lower Overall Costs.

Since 1887

Shawnigan Lake School - Ice Rink
Shawnigan Lake, Victoria, British Columbia, Canada

ACCENT REFRIGERATION SYSTEMS

A Whole New Shade of Green

Energy Efficient Ice Arena 20 Year Life Cycle Analysis

For more information please contact:
Accent Refrigeration
250-478-8885
info@accent-refrigeration.com

Hi,

Thank you for considering Accent Refrigeration. Over the last 25 years we pride ourselves on installing the most energy efficient refrigeration systems around the world. We understand an ice arena refrigeration system is as unique as your personality. At Accent Refrigeration Systems, we do not subscribe to rules of thumb or generally accepted industry data, as these concepts are usually regionally developed remedies and very often out of tune for what is really required in today's energy conscious market.

Using this design methodology Accent Refrigeration partnered with Shawnigan Lake School to install a refrigeration system which reduced runtime, required minimal maintenance, and provided tight ice conditions, while also removing the requirement for any supplementary heating through natural gas or electricity by providing 100% of the heat required to:

- Dehumidify the ice arena
- Heat water for the Zamboni
- Heat the domestic hot water
- Heat the ice arena
- Heat the arena offices and lobby

On top of this, the refrigerant used has been designated by the USA and Canadian governments to be future proof and has no negative effects on the environment, which is in line with the Montreal Protocol.

After starting in January 2015, the following real world energy data and energy bills were collected and compared with the average Canadian ice arena using a comprehensive Natural Resource Canada report.

As can be seen in Graph 1, the ice rink installed at Shawnigan Lake School is going to save the school over $850,000.00 in the next 20 years. These energy savings considered the base electrical charge, power factor, and demand charge of Shawnigan Lake School.
For more information please see Graph 2, which shows the energy data used to calculate these energy savings.

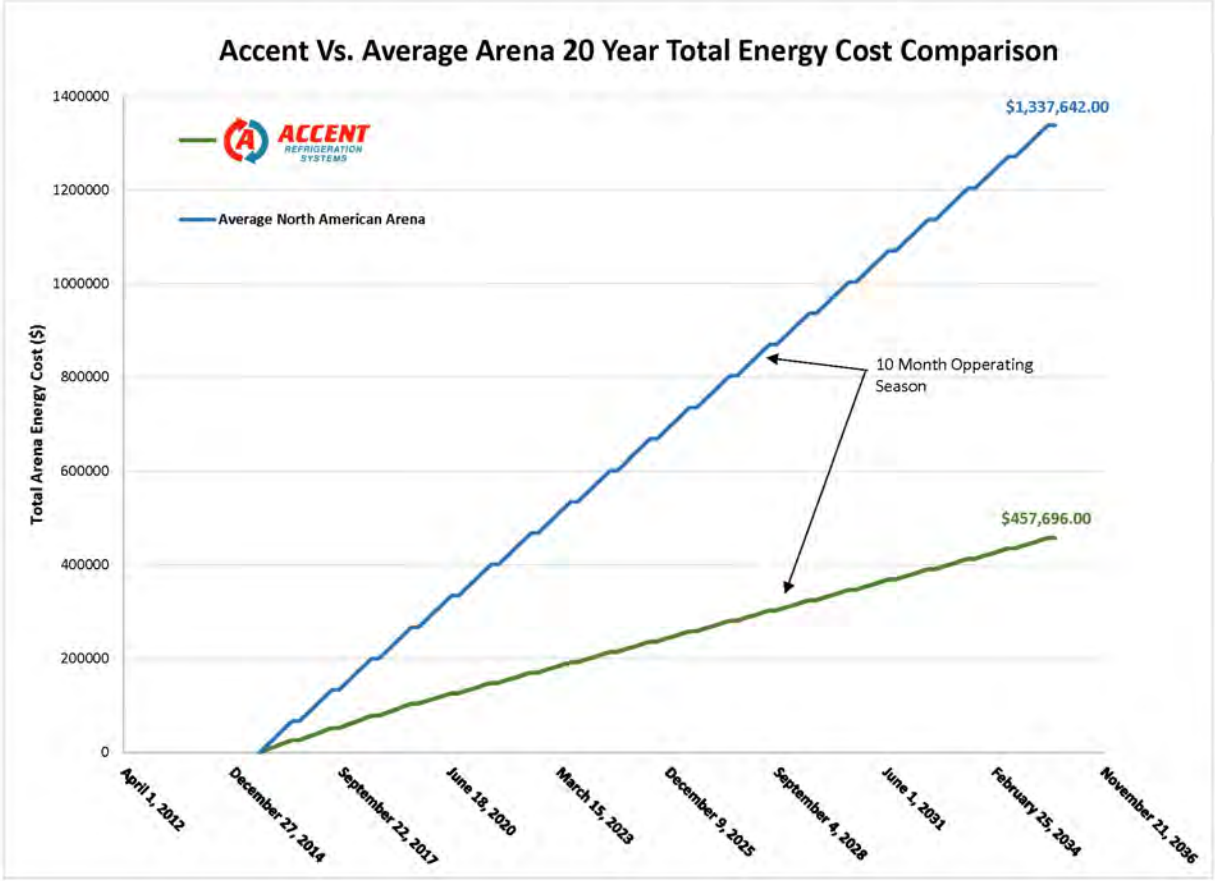
2009 VIATeC TECHNOLOGY AWARD WINNER ENVIRONMENTAL EXCELLENCE

ASHRAE INTERNATIONAL DESIGN AWARD ENERGY EFFICIENCY NEW PUBLIC FACILITIES

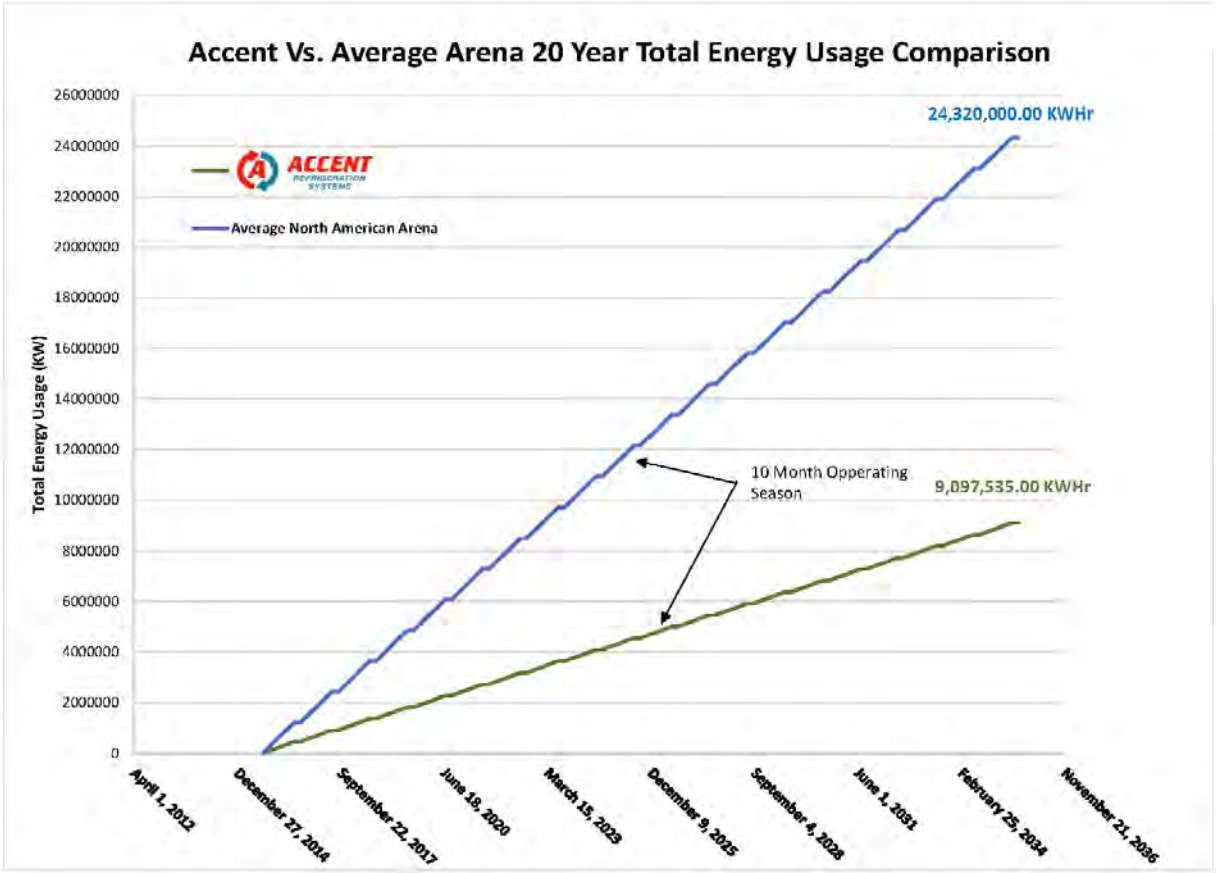
2009 BC EXPORT AWARDS Celebrating British Columbia Export Excellence SUSTAINABILITY AWARD WINNER

International Design Award

Graph 1 - Ice rink installed at Shawnigan Lake School is going to save the school over $850,000.00 in the next 20 years



Graph 2 - Energy data used to calculate these energy savings



Quote from Accent Refrigeration Systems

I would highly recommend a Sprung Structure. They have a very good level of insulation, the white color combined with the angles minimize radiant heat transfer to the ice, the inside is nice and bright and they go up fast and are reasonably priced.

We just completed a full size rink in Shawnigan Lake in 58 days from breaking ground to skating. I have attached a picture facing towards the lobby that is boarded off and still under construction. The operating cost for the first month was $59.50 per day for refrigeration, hot water, building heat and dehumidification. This is a full size rink.

Art Sutherland
Accent Refrigeration Systems

Vancouver Canucks
2016 Training Camp
at Shawnigan Lake School

Videos:

Shawnigan Lake School Hockey Arena
https://youtu.be/R3EBnOALC7g

Vancouver Canucks 2016 Training Camp at Shawnigan Lake School
https://youtu.be/epLQld-XNp0