

# OLYMPIC HIGH SCHOOL

Bremerton, Washington  
USA

Olympic high school in Bremerton, Washington required a more efficient way of heating the water in their indoor swimming pool.

## The Solution

An Aermec air to water NRL heat pump was installed to provide heat to the swimming pool in a highly efficient manner.



# LAKE WASHINGTON STEM MIDDLE SCHOOL

Redmond, Washington  
USA



This new LEED platinum Science, Technology, Engineering and Mathematics (“STEM”) middle school is a modular structure whereby the main building elements including HVAC controls, electrical, hydronic and plumbing components were built offsite and trucked 200 miles for onsite assembly and integration. Of note is that the Pacific Northwest is notoriously challenging for heat pump controls. Fog and average winter conditions of 41°F (5°C) with 80% RH make frost control a significant issue for most of the heating season.

## The Solution

An Aermec NRL 600 HA was selected as the primary heating and cooling plant in this primarily heating application. Two characteristics of the Aermec design were critical: (i) low temperature heating performance and (ii) superior defrost strategy. The unit was sized to provide the total building heating load down to approximately 35°F. Boilers will provide supplemental heating and backup during the 300 or so hours per year that the outside temperature falls below this level. Summer cooling requirements are low in this coastal marine environment. An Alerton BMS manages the buildings fan coils and individual room thermostats, adjusting supply water temperatures in the 2-pipe system to meet heating and cooling requirements.