Project

Name Willapa Valley Elementary

Location Raymond, Washington

Completion Date July 2013

The Team

HVAC Contractor Sunset Air Inc.

HVAC Distributor Johnstone Supply

Fujitsu Equipment

(9) ASU12RLS Wall Mount

- (9) AOU12RLS2 Outdoor Unit
- (4) ASU7RF Wall Mount
- (1) AOU36RLXFZ Multi Outdoor Unit



Halcyon

This School Gets an A+ for Savings

Willapa Valley Elementary School was originally built in 1963 and is 14,000 square feet. The HVAC for the School consisted of a fuel oil fired hydronic boiler and unit ventilators for each classroom space. The office spaces had radiant fin tube heater with no ventilation.

In 2012, Sunset Air performed an energy audit and determined that if the school was retrofitted with Fujitsu ductless heat pump units and air to air heat exchangers, it would not only bring the space up to code, but it would also save the school district \$13,600 per year (72% of their baseline utility costs of \$18,800 annually).

Sunset Air also secured a utility incentive of \$6,500 for the energy upgrade, and applied for an energy efficiency grant from the Office of Superintendent of Public Instruction (OSPI). The school district received \$158,000 from OSPI, reducing their out of pocket expenses to \$100,000.

Design Challenge

One challenge Sunset Air's engineers had to deal with was where to put the outdoor heat pump units to avoid potential vandalism and exterior aesthetics. It was determined the roof was the most suitable location.

Solution

Fujitsu offered a very convenient occupancy sensor set back feature that worked perfectly for a classroom application and it was a very cost competitive solution.

Results

The Fujitsu ductless solution with ventilation, provided air to air heat exchangers, dramatically improving the comfort level. It provided a much quieter teaching environment, and saved the school district \$13,500/year in utility costs.



"Sunset Air was innovative, responsive and delivered excellent energy savings while making our space more comfortable."

> Rob Friese Willapa Valley School District Superintendent