

FRANCIS WALSH INTERMEDIATE SCHOOL

Reduced Energy Consumption Eases Budgetary Pressures

Comprehensive Solution Improves Learning Environment

Challenge

Escalating energy costs, an aging mechanical system infrastructure, operating costs related to maintenance, repair & energy usage and indoor air quality (IAQ) issues.

Solution

Updating the aging facility mechanical systems, reducing energy consumption and adding a direct digital control (DDC) energy management system to monitor temperature, humidity and CO₂ levels in the instructional areas of the school were two of the improvements.

Project Scope

\$1,280,000 million performance contracting project included:

- New high-efficiency centrifugal chiller with variable frequency drive
- New cooling tower with variable speed drive and filtration system
- New condenser water pump
- New refrigerant monitoring system
- Conversion of constant volume HVAC units to variable air volume air handling units
- New zone sensors to control the flow of air to individual zones
- Replacement of standard efficiency motors with new premium high-efficiency motors
- Increased outdoor air flow and addition of a direct digital control energy management system to monitor temperature, humidity and CO₂ levels
- Replacement of existing boilers with high efficiency, dual fuel boilers
- Energy audit
- Personnel training
- Maintenance

Results

Guaranteed Annual Energy Savings: \$121,200

Competitive Oil & Dual Fuel Heating Efficiency Program (CODFHEP) Grant through the Energy Unit of the Connecticut Office of Policy and Management (OPM) available to K-12 schools in Re-build America communities: \$30,000

U.S. Environmental Protection Agency (EPA) ENERGY STAR Rating: Retrocommissioning in the summer of 2007 revealed that the results of the heating and cooling renovation and lighting retrofit made the school eligible for an ENERGY STAR Rating. With the assistance of Trane, Branford earned the ENERGY STAR, which means Francis Walsh Intermediate School is using about 35 percent less energy than an average building.



Francis Walsh Intermediate School

The Branford Public School District in Branford, Connecticut consists of one high school, the 248,000 square foot Francis Walsh Intermediate School, three elementary schools and a pre-kindergarten facility.

For more information, contact your local Trane office or email kbackenson@trane.com.

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