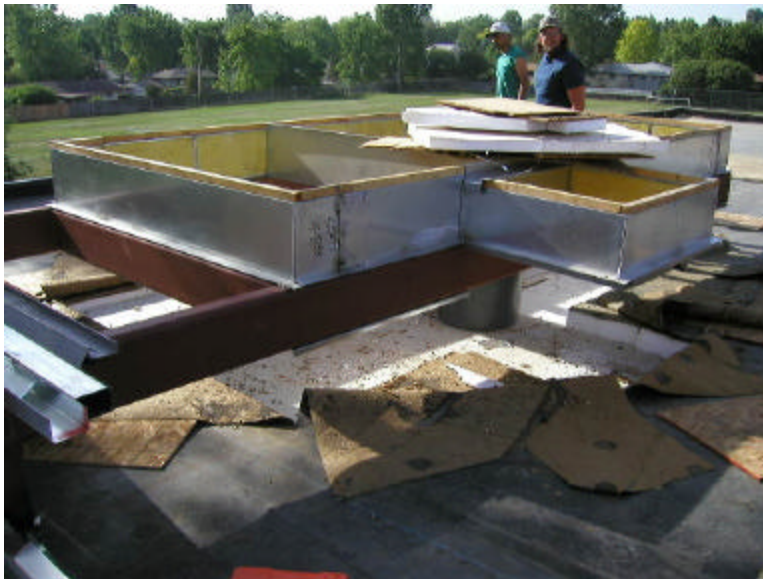




Two views of new unit & supporting platform.



Project Notes:

The problem at Hackberry Hill Elementary School was an HVAC unit that was both inefficient and noisy. The unit provided inadequate heating and air conditioning and the noise was so loud as to make the classrooms within the general proximity almost unusable. The school's structural system is wood that acted like a "drum" amplifying the noise.

The school district received a grant from the state that would pay for two-thirds of the replacement cost. The solution was to replace the existing mechanical unit with a new air handler and a remote condensing unit. The unit was placed upon a steel frame that was independent from the existing building. New supply air ductwork and hot/cold water coils were provided.

Slight modifications to the existing system were made that allowed for the use of a return air plenum in the corridor. The job was a negotiated contract with work starting in early May in areas that had no impact upon school operations; the work was complete and operational August 1, 2002.

Mechanical Engineer: Energywise Technologies, Inc.

Electrical Engineer: JCN Engineering

Mechanical Contractor: Whitney Mechanical Company

Project Budget: \$265,400

Project Bid: \$265,400

Final Cost: \$281,250

Area of new construction: N/A

Area of renovation: 6,720 SF

Project completed: August, 2002.

**Mechanical Renovation Hackberry Hill Elementary School
Jefferson County School District R-1**

Arvada, Colorado

reed & associates, architects