

# *SRP PROJECT of the MONTH*

## *BEAVERDAM ELEMENTARY SCHOOL*

Beaverdam Elementary School in Hanover County is a single story, H-shaped building with all classrooms having an exterior exposure. Renovated over the course of two summers, the goal was to replace the existing Unit Ventilators with a new air conditioning and heating system. With no ceiling space to run ductwork, and no ability to locate any equipment on the light gage metal roof framing, the solution was to install individual units in each classroom that could heat and cool the room while also dehumidifying. The new units chosen were Vertical Heat Pumps with electric heat, and integral energy recovery wheels to pre-condition the outside air. The units also contain Hot gas reheat coils for dehumidification, and an acoustic plenum for an extra measure of sound attenuation. The existing wall openings were filled in with brick and new holes were cut into the wall for the new units. Before and after photographs of the classrooms are shown below.



SIMMONS ROCKECHARLIE & PRINCE  
INC.  
8416 Glazebrook Ave.  
Richmond, Virginia 23228

Phone: 804-262-7323  
Fax: 804-262-0021

**SRP**  
Consulting Mechanical &  
Electrical Engineers