

Shelby High School

A new High School opened for students in Shelby, Ohio. The 110,000 square foot facility features a 630 seat Auditorium with Stage, a 1,400 seat Gymnasium with Locker rooms, a 2-story Academic Wing with central learning areas that reflect a "family room" atmosphere, a 4,000 square foot Vo-Ag Shop and a grand Main Entrance.

The HVAC system is housed within (3) three mechanical rooms and consists of nine (9) air-handling units complete with heating and chilled water coils as well as air-side economizer. Four (4) of the air-handling units include heat recovery, while the majority of units also utilize variable frequency drives for fan speed control to provide energy savings. The air distribution system consists of single duct VAV terminal units and fan-powered parallel terminal units complete with hydronic reheat coils for independent temperature control in each space.

Heating water is efficiently generated by two (2) 300MBH gas-fired condensing boilers, and chilled water is produced by a 300 ton air-cooled packaged chiller located within the utility yard at the North end of the building. The boiler and chiller plants both utilize variable speed pumping systems.

Specialty systems include dust collection in the Vo-Ag Shop, radiant ceiling panels along the exterior wall of the Administration Area, grease hood exhaust in the Kitchen, ductfree mini-splits for 24/7 operation in the technology closets and Science Lab exhaust systems.

