

PUTNEY SCHOOL - PERFORMING ARTS CENTER  
PUTNEY, VT

CHARLES ROSE ARCHITECTS  
20,800 SQUARE FEET

The Putney Performing Arts Center is a 20,800 square foot facility consisting of an auditorium, dance studio, classrooms, art galleries, practice rooms, offices and conference spaces. The building is a metal-framed structure. The walls are insulated with 3 inches of R-7 foam board to provide an overall R-value of 24. The roof is a green roof and has a 4" of R-5 foam board to yield an R-value of 23. The windows are high performance Viracon units with an overall U-value of 0.31.

The heating system consists of both Runtal fin tube radiation with a reverse return hydronic piping loop. Circulator pumps have variable speed drives. Heat is provided by two high efficiency Buderus 315-7 and oil fired boilers which also provide domestic hot water. The boilers have lead-lag controls and secondary circulators to isolate the cold boilers. Ventilation of small perimeter offices is by natural means. Ventilation of the dance studio, Carrier room and multi-purpose room is provided by a Venmar ERV3000i enthalpy recovery units. Ventilation of the auditorium is provided by an air-handling unit and is automatically controlled based on occupancy using CO2 sensors.

The Putney School Performing Arts Center performs a total of 27.8% better than ASHRAE 90.1-2001 requirements using the Energy Cost Budget (ECB) methodology.

