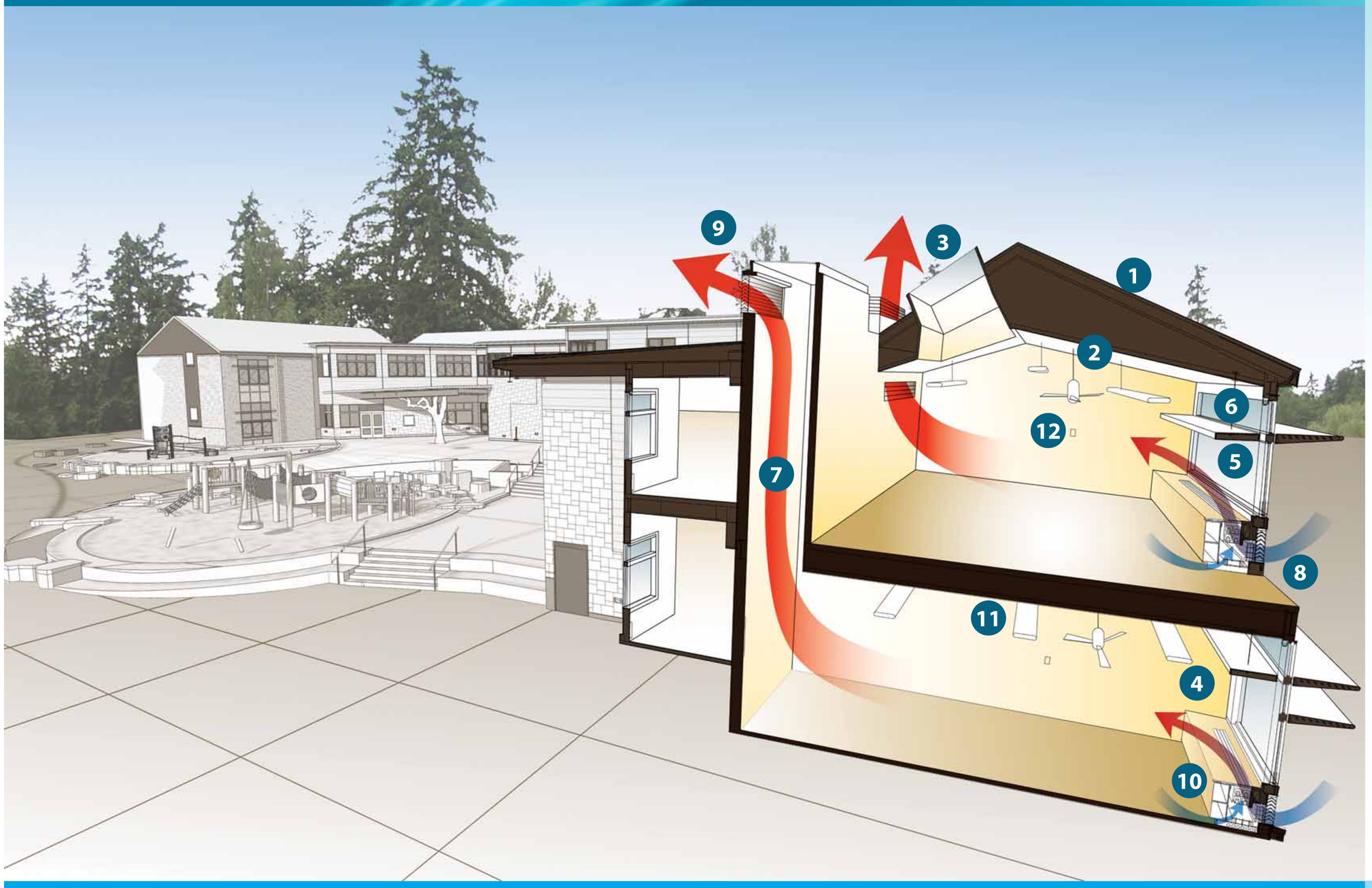
ST. THOMAS SCHOOL
Medina, Washington

Environmental stewardship falls squarely within St. Thomas School's mission "to develop responsible citizens of a global society." The new school building teaches environmental responsibility and energy savings by example. It also demonstrates that passive ventilation, daylighting, and other green building strategies not only save energy but also improve the learning environment. The Bassetti Architects design team achieved this sustainable design without major impact on construction costs by utilizing a collaborative, integrated design process.

Energy Use Intensity (EUI): 71.3 kBtu/sf/yr
Percent CO_2 reduction: 28%
ENERGY STAR design rating: 82
Energy savings: 1,500,098.4 kBtu
CO_2 savings: 65.7 tons CO_2
Space type: K-12 Schools
Total Square Footage: 55,000 SF
Energy Cost/SF: $0.43 per square foot



DESIGN CHARACTERISTICS

1 ENERGY STAR cool roofs reduce urban heat island effect.

2 Fabric ceiling panels distribute daylight and improve acoustic performance

3 Insulated fiberglass skylights provide diffuse light with reduced heat energy loss

4 High R-value (R-26) walls with rigid insulation reduce thermal bridging

5 Operable windows provide user control of fresh air and temperature

6 High windows bring daylight deep into the classroom

7 Daylight shafts bring light to the back of rooms on the lower floor

8 Automatic dampers control the passive intake of fresh air

9 Automatic dampers control the passive exhaust of heated air

10 High efficiency finned tube radiators heat the incoming air and the recirculating indoor air

11 Photocells save energy by controlling high efficiency, indirect lighting

12 Temperature and CO2 sensors control the intake and exhaust dampers

DESIGNED TO EARN THE ENERGY STAR

The estimated energy performance for this design meets US EPA criteria. The building will be eligible for ENERGY STAR after maintaining superior performance for one year.

BASSETTI ARCHITECTS

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www.bassettiarch.com