

Announcing New York's First *NY-CHPS Verified* School Building:

Hampton Bays Middle School Long Island, New York



Hampton Bays Middle School has been named by a thirty party team of experts as the first *NY-CHPS Verified* school building. Designed and built to provide both a superior learning environment and a durable, cost-effective structure, the school exceeds standard building codes while operating at lesser expense. Located on Argonne Road East , Hampton Bays, Long Island, and a part of the Hampton Bays School District, the high performance features of the building combine to warrant its designation as the first New York school that has been confirmed as built to *NY-CHPS Guidelines*.

The New York High Performance Schools Guidelines (NY-CHPS) provide a framework for school districts and their design teams as they plan, build, and maintain energy efficient, sustainable school buildings. The New York State Education Department has tailored NY-CHPS for New York code requirements and to follow NYSED priorities. New York schools may be built or renovated to meet NY-CHPS Criteria; NY-CHPS Verified, a no-cost, third-party verification program offers school districts the opportunity to ensure that a Project meets all performance standards approved by the school district and community.

In committing their Project to be a NY-CHPS building, the school district and community make a clear policy and financial pledge to build a high performing school; to help districts fulfill this promise, NYSERDA and NYSED have developed the NY-CHPS Verified Program to ensure that the Project meets all predetermined

standards. This assurance is attained when the NY-CHPS Verified Team confirms that a Project has met all NY-CHPS Prerequisites and has accomplished at least 65 optional points.



NY-CHPS Verified Process

Step One: When submitting the NYSED Letter of Intent for a Project, state intent to be a NY-CHPS Verified High Performance Building. NYSED staff will notify the NY-CHPS Verified Team and the Team will contact the Project Architect with more information.

Step Two: During the design process, the design team may contact the Team for more information, to answer questions regarding Criteria definitions or requirements and/or to request official Criteria Interpretations.

Step Three: Upon submission of required materials to NYSED (typically at 100% construction documents) the Project Architect submits the completed NY-CHPS Verified Application Template and required supporting materials to the NY-CHPS Verified Team for Review.

Step Four: Technical experts review specific Criteria from the Template to ensure compliance with Prerequisites and optional point Criteria. Questions and concerns are addressed with the Design Team until there is satisfaction that compliance is complete.

Step Five: Post Construction documentation is reviewed as in the Design application

Step Six: NY-CHPS Verified High Performance Building status is approved and announced!

New York's First NY-CHPS Verified School: Hampton Bays Middle School

Opened in April of 2008, in celebration of the school district's Centennial celebration, the new 143,746 square foot, \$42,000,000 Hampton Bays Middle School meets NY-CHPS prerequisites and qualifies for 67 credits – two credits more than required. Designed by BBS Architects of Patchogue, NY, with Beatty, Harvey, Coco Architects of Hauppauge, NY, Hampton Bays Middle School exemplifies advanced building performance and **energy efficiency**.

Built to perform at an energy efficiency 27% greater than standard building code, the school utilizes highly efficient products and controls to minimize operating costs—and is noted for having 'hit the limit' for energy savings (without the use of renewable technologies).



The lighting system largely consists of hi-lumen low power T-8 lamps, with T-5 lamps in selected areas. Lights are turned "off" when the rooms are vacant via the placement of occupancy sensors in highly trafficked areas such as classrooms, offices, and the library. Taken together, these high performance lighting systems will save the school approximately 536,000 kilowatt hours of energy per year - amounting to nearly \$100,000 in energy savings. In turn, the Hampton Bays Middle School received a \$300,000 rebate through the Commercial Component of the Long Island Power Authority's Efficiency Long Island Initiative - a rebate designed to offset the incremental first cost of installing an enhanced lighting system. As noted by Superintendent Joanne Loewenthal, "In today's economy, where every school dollar counts, operating an educational institution with this level of efficiency will no doubt have a positive effect on not only school tax bills, but the environment as well." (LIPA Newscenter Press Release, July 11, 2009)

Additional notably excellent design features of the Hampton Bays Middle School include indoor environmental quality, moisture and mold protection, and integrated design practices.

Indoor Environmental Quality

Controlling construction pollution, specifying low emitting materials, utilizing walk-off grills and mats, and carefully locating air intakes and returns has minimized levels of particulate and volatile organic compounds within the school. The use of high efficiency filters further maintains indoor air quality.

Moisture and Mold Protection

Prevention of mold and moisture is critically important to both protecting and maintaining indoor air quality, and supporting the longevity of the school building. The architect's careful attention to moisture barriers, prevention from mold formation, and precise sealing of joints were deemed 'exemplary' by the NY-CHPS Verified Team. The durable materials selected for all walls, roofs, floors and ceilings are noted for their ability to prevent water infiltration and ensure long life.

Integrated Design Practices

Working in conjunction with school district officials, engineering team partners, and operations and maintenance representatives, BBS Architects undertook an integrated design approach to producing an efficient, cohesive school building. For example, by designing classrooms to be equipped with six light fixtures, as opposed to the standard design of ten fixtures, the architect reduced the amount of heat given off by light sources. The engineering team responded by sizing the HVAC system accordingly, thus reducing the first-cost of the system to the school district.



As BBS principle architect Roger Smith notes, "The new school will stand as a testament to a moment in an architect's career when all moons are in alignment- a wonderful image brought to life through the collaborative effort of many - the Hampton Bays Community, the talented architects and engineers, LIPA and the construction managers and contractors- all working to a common goal- a better and more sustainable environment." (LIPA Newscenter Press Release, July 11, 2009)

High performance schools help to first ensure healthy, safe, and enhanced learning environments, and second to minimize the environmental impacts of building's footprint and use. Designation as a NY-CHPS Verified school denotes and assures that Hampton Bays Middle School operates as a high performance school building.