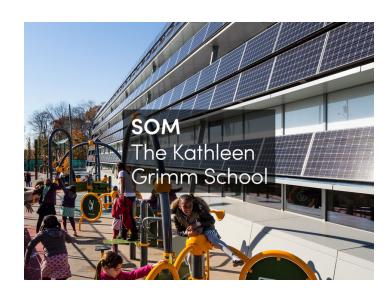
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# THE KATHLEEN GRIMM SCHOOL

Posted on May 23, 2018 by Urban UrbanNext



Categories: Energy and sustainability, High Density, Middle Density, Project, SOM, Urban Paradigms

Tags: Ecological agencies, Ecological researches, Education, Efficiency, Efficiency measures, Energetic Approach, Energy consciousness, Energy consumption, Facilities, Green roofs, Heliomorphism, New York, Project, Shade Shaping, Solar Energy, Sustainability, Sustainable, Sustainable construction, Urban Paradigms, Zero Energy

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The Kathleen Grimm School for Leadership and Sustainability at Sandy Ground is the first net zero energy school in New York City and one of the first of its kind worldwide. The 68,000-square-foot, two-story school serves 444 pre-kindergarten through fifth grade students. The cutting-edge building harvests as much energy from renewable on-site sources as it uses on an annual basis.



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Designed to comply with the SCA Green Schools Guide in lieu of LEED® certification, the project is the NYC School Construction Authority's first "sustainability lab." This exploration into ultimate sustainability will provide substantial benefits to the City's School Design Program and help achieve PlaNYC goals for significant reductions in global warming emissions. SOM's design offers an energy-use reduction of 50% over a SCA standard public school.

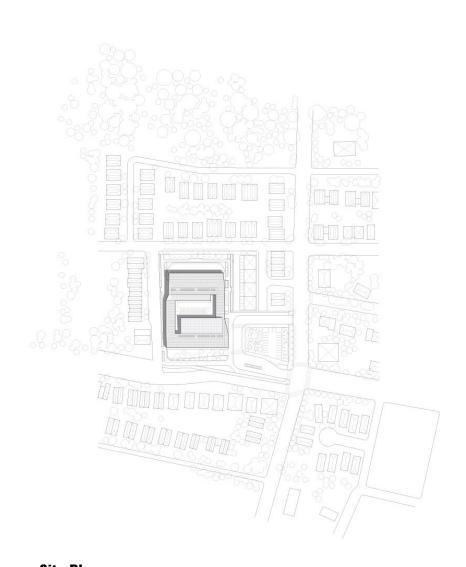
The Kathleen Grimm School https://urbannext.net/the-kathleen-grimm-school/

PROJECT NAME

P.S.62 NET ZERO ENERGY SCHOOL

SITE PLAN

COMPLETED 2015



**Site Plan** 

The Kathleen Grimm School https://urbannext.net/the-kathleen-grimm-school/

PRO JECT NAME

P.S.62 NET ZERO ENERGY SCHOOL

LOCATION

STATEN ISLAND, NEW YORK

DRAWING NAMI

SECOND FLOOR PLAN

PHASE SUBMITTED

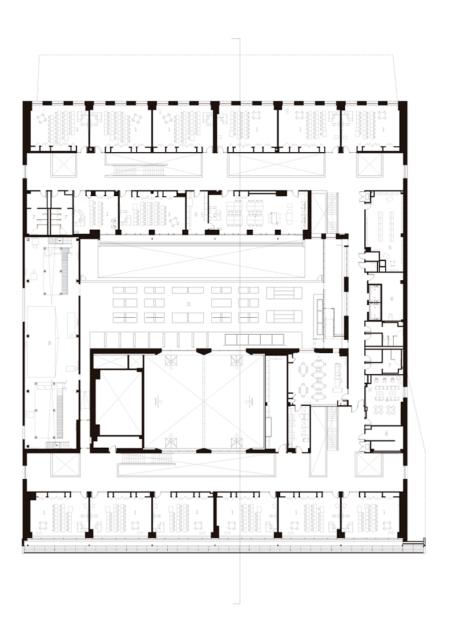
COMPLETED 2015

EGEND.

CLASSROO GYMATORIK CAFETERIA OFFICE STORAGE SERVICE RESTROOM MEP

RESTROOM MEP LIBRARY COURTYARD GARDEN





**Plans** 

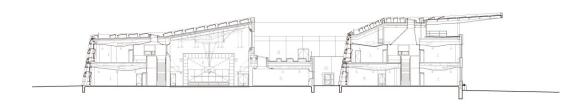
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P.S.62 NET ZERO ENERGY SCHOOL

NORTH SOUTH SECTION

COMPLETED 2015

0 5 10 20



**North South Section** 

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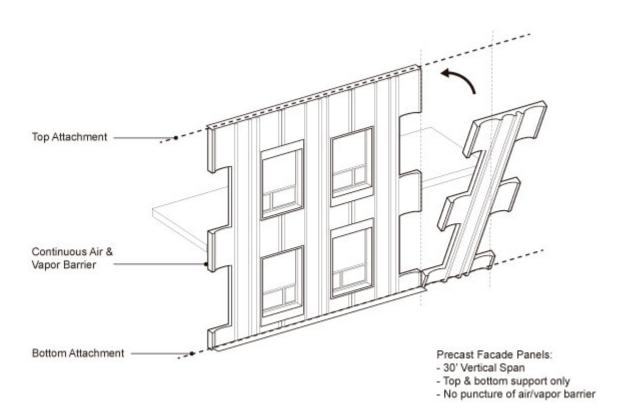
P.S.S. MET ZERO
ENERGY SCHOOL

EAST ELEVATION

COMPLETED 2015

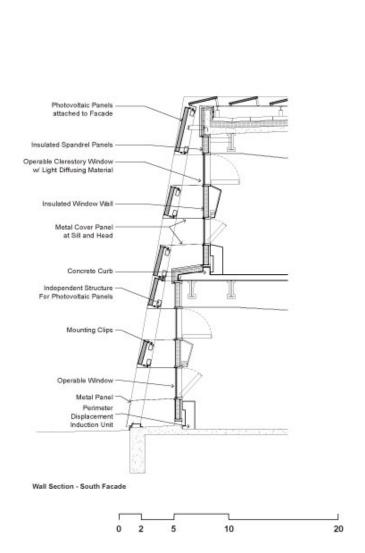
**East Elevation** 

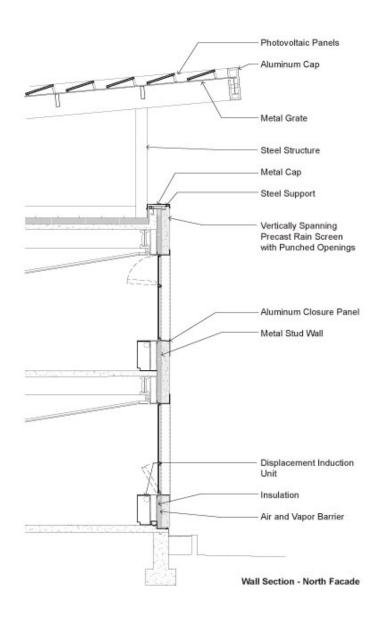
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**Precast Diagram** 

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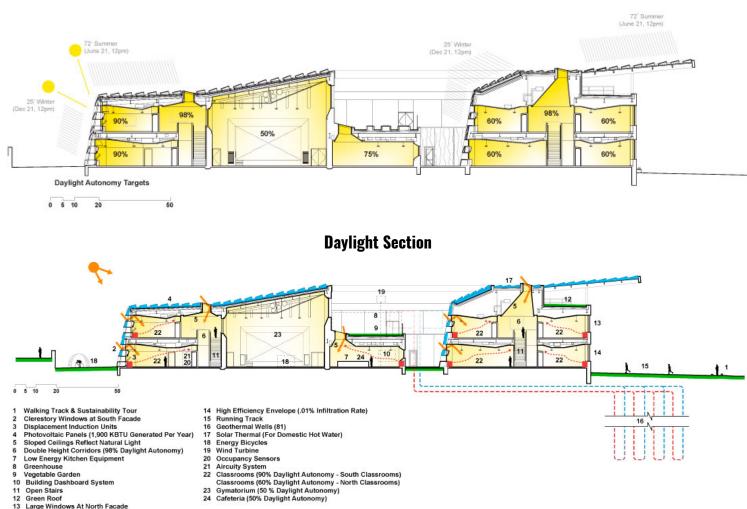
#### **Wall Sections**

SOM optimized the orientation and massing of the courtyard-shaped building to take advantage of sunlight for both ample daylighting and photovoltaic arrays on the roof and south facade. Other sustainable and low-energy features incorporated in the design include an ultra-tight high-

Greenhouse Vegetable Garden Building Dashboard System 11 Open Stairs 12 Green Roof 13 Large Windows At North Facade

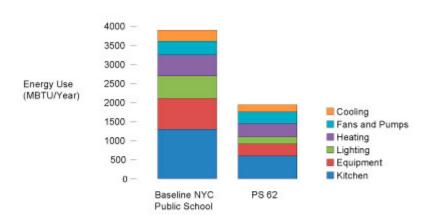
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performance building envelope, daylit offset corridors, energy-efficient lighting fixtures, low-energy kitchen equipment, a greenhouse and vegetable garden, a geo-exchange system, energy recovery ventilators and demand-control ventilation, and a solar thermal system for hot water.

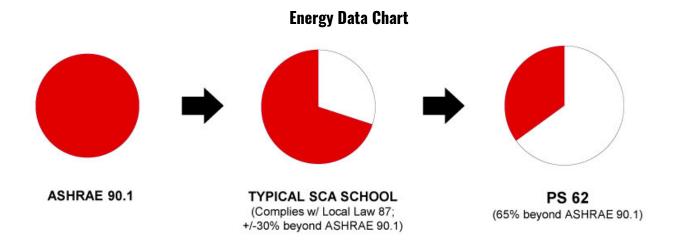


#### **Sustainability Section**

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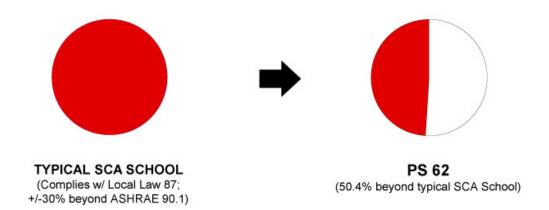
Information depicted is based on design analysis, preliminary in nature, and will need to be verified through the course of the building's operation.



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ENERGY USE

#### **Comparative Energy Use**

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