BuroHappold Engineering provided MEP engineering services as well as essential advisory services in its review of the proposed façade and structure to ensure energy efficiency and mitigate condensation and thermal property issues that could result in damage to the artwork and building.

Located on a 14 acre site in the village of Water Mill, in the heart of Long Island’s East End, the new Parrish Art Museum integrates architecture and landscape that both respects and reflects the singular natural beauty and rich artistic legacy of the area. Working in collaboration with the Parrish, the design concept was tailored to create a visual narrative that unfolds in a light-filled network of connected galleries, simple shapes that evoke the idea of a collection of studio spaces, or an artists’ colony.

The Parrish Art Museum engaged the design team to provide a robust sustainable solution for the facility that balances energy performance and close thermal control.

The high ceilings of the building allowed for the integration of an underfloor ventilation system that offers tight control of temperature and humidity within the artwork display zones in the gallery spaces. The system introduces air through floor grilles so that the higher spaces outside of the artwork display zone are not subject to the same close control conditioning, thereby saving energy and cost without impacting the museum’s art preservation efforts.

Perhaps the most notable part of the energy system design for the museum is that which is entirely integrated into the site and landscape. BuroHappold designed an open-loop ground source heat pump system to provide all heating and cooling for the building. The open-loop system is considered the most efficient ground source heat pump configuration, and it allows Parrish to maintain stringent control conditions for its collection in a comfortable environment.

CLIENT
Parrish Art Museum

ARCHITECT
Herzog & de Meuron

PROJECT VALUE
$65 million

DURATION
Completed in 2012

SERVICES PROVIDED BY BuroHappold
Structural engineering, MEP engineering, facade engineering