

# Dagher Engineering and Hoboken Brownstone Co. win prestigious engineering excellence award for Jersey City Residential Development

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Building systems engineering firm Dagher Engineering was awarded the American Council of Engineering Companies New York Platinum Award for Van Leer North, an energy-efficient residential development on the site of the former Van Leer Chocolate Factory in Jersey City.

The firm worked with owner and developer Hoboken Brownstone Company, architecture firm Chester, Ploussas, Lisowsky Partnership, and consulting architect Michael McDonough to develop a competitively-priced, near net-zero development.

Hoboken Brownstone Company previously received the Governor's New Jersey Environmental Excellence for Innovative Technology Award for its efforts to redevelop the contaminated brownfield site into a low-energy demand building. With construction now nearing, the development is gaining recognition for its use of sustainable building technologies.

The project's primary feature is the Insulative Mass Wall (IMW), a non-structural exterior enclosure that takes advantage of the benefits of Autoclaved Aerated Concrete (AAC), a lightweight prefabricated masonry material. Due to the material's ability to resist outdoor temperature fluctuations and retain indoor temperatures, this specially-formulated concrete is vastly more efficient than regular concrete block and other traditional exterior wall assemblies.

In addition to the unique building enclosure, other energy-saving features incorporated into the project include geothermal heating and cooling, solar panels, ventilation with energy recovery, LED lighting, and solar water heating.

The project team performed extensive energy modeling to optimize the AAC enclosure and test its effects on the mechanical and electrical systems. This integrated approach to energy reduction resulted in an estimated savings of 57% over the New Jersey Energy Conservation Code's requirements.

Through this project, the team intends to prove that high performance residential construction can be achieved at a competitive cost. This design will lay the foundation for a paradigm shift in residential development that will ultimately lead to more energy-efficient buildings with savings that can be passed on to tenants.

Dagher Engineering is a New York-based engineering and sustainability consulting firm specializing in holistic building systems design.

For more information on Dagher Engineering, visit [www.dagherengineering.com](http://www.dagherengineering.com). For more information on the Hoboken Brownstone Co. visit [www.HBrownstone.com](http://www.HBrownstone.com).