



Building with conscience.

Linden Grove

StoTherm® ci with StoCast Brick provides a lightweight, sustainable facade system for an affordable housing project with a tight budget.

Facades



StoTherm® ci proves to be the perfect lightweight solution for a modular design with an imperfect substrate.

Sto Products	StoTherm® ci with StoCast Brick
Architect	Chris Benedict Architecture
General Contractor	Elite Wall Systems
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Linden Grove is a 13-story affordable housing project in Brooklyn, New York. Like most affordable housing projects, Linden Grove necessitated innovative thinking to achieve more with less. Despite having a limited budget, the developer, Blue Sea Development Company, intended that the finished product be sustainable, energy-efficient, and aesthetically modern while respecting Brooklyn's architectural styles.

A Non-Traditional Solution for a Traditional-Looking Building

The original design plan called for a traditional build to complement Brooklyn's traditional aesthetic. However, the property owner was curious about a modular panel solution. After exploring the possibilities and weighing the pros and cons of this non-traditional option, they opted for a modular panel solution that would minimize weather-related delays, reduce disruption to neighbors, and allow the building to be dried more quickly than traditional construction. Once the panels arrived, the next challenge was creating a durable, energy-efficient, authentic-looking facade.

A Higher International Standard of Energy Efficiency

Not only did the property owner want the building to be energy-efficient, but they also insisted it meet Passive House standards, a performance-based building certification focused on the dramatic reduction of energy use for space heating and cooling.

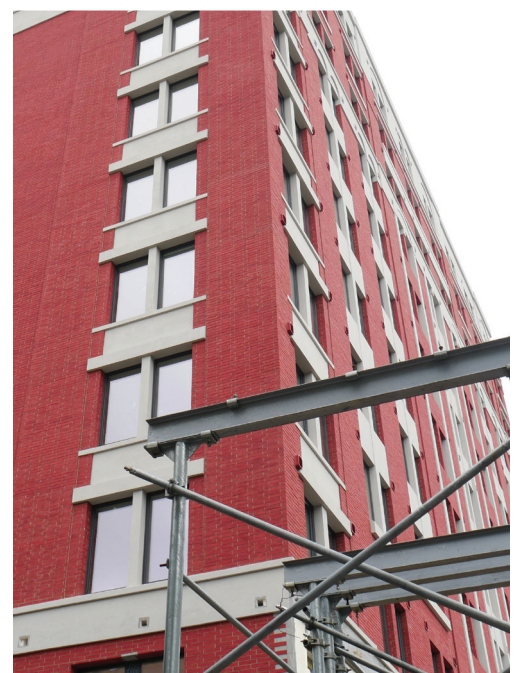
Fortunately, Chris Benedict Architecture has applied these standards to projects since 2006. Chris Benedict, the firm's owner and lead architect on the project, knew the

"Because of the continuous insulation that's used, we can achieve a tight thermal envelope; it's like wrapping a blanket around the building! Insulating the outside of a building is the best way."

Chris Benedict | Chris Benedict Architecture

perfect solution to achieve these standards: StoTherm® ci. StoTherm® ci is an EIFS with a continuous drainage insulation wall system. It is a high-performance, energy-efficient wall cladding that integrates StoGuard® air- and water-resistive barrier, EPS insulation, and drainage. It can achieve a variety of aesthetic appearances using Sto textured finishes, Sto specialty finishes, or StoCast surface components. This innovative system proved flexible enough to adjust for irregularities, such as modular panels that were not always plumb and square or substrate inconsistencies common with modular construction.

"Because of the continuous insulation that's used, we can achieve a tight thermal envelope; it's like wrapping a blanket around the building! Insulating the outside of a building is the best way. You'll never have condensation inside the walls, it's not interrupted by plumbing and fasteners, and the interior walls are always room temperature," commented Benedict.





StoTherm® ci provided Linden Grove with a 5-8" uninterrupted blanket of insulation around the entire building. Equally important, this consistent substrate gave the architect the design freedom to use StoCast Brick to achieve the traditional Brooklyn brick aesthetic the owner desired. Familiar with Sto Corp.'s facade solutions, she knew that not only would this innovative continuous insulation wall system provide a sustainable solution, but the team would also need to replicate the rich, traditional brick look that defines Brooklyn's architecture.

**"StoCast Brick can do everything that real brick does,
and it is the most authentic-looking faux brick product
on the market"**

Rich Sangiorgi | Elite Wall System

StoCast Brick Delivers Authentic Aesthetic With Modern Advantages

In keeping with the environmentally friendly goals of the project, StoCast Brick was selected for the exterior finish. Unlike traditional brick, StoCast Brick is lightweight, flexible, easy to install, and sustainable, manufactured with lower energy demands and reduced shipping costs. Yet, there is no sacrificing on the aesthetic to achieve these energy-efficiency goals. StoCast Brick looks like real brick. Some even say it looks better than real brick—often appearing brighter, with more color consistency.

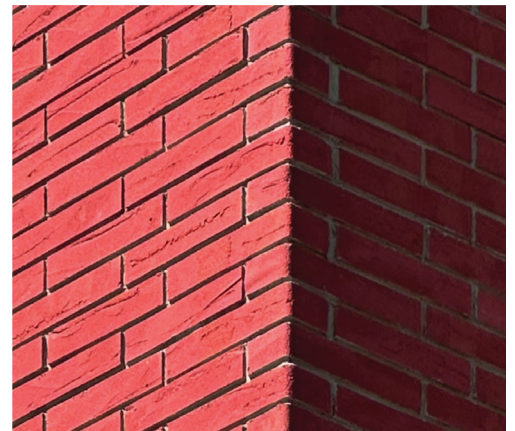
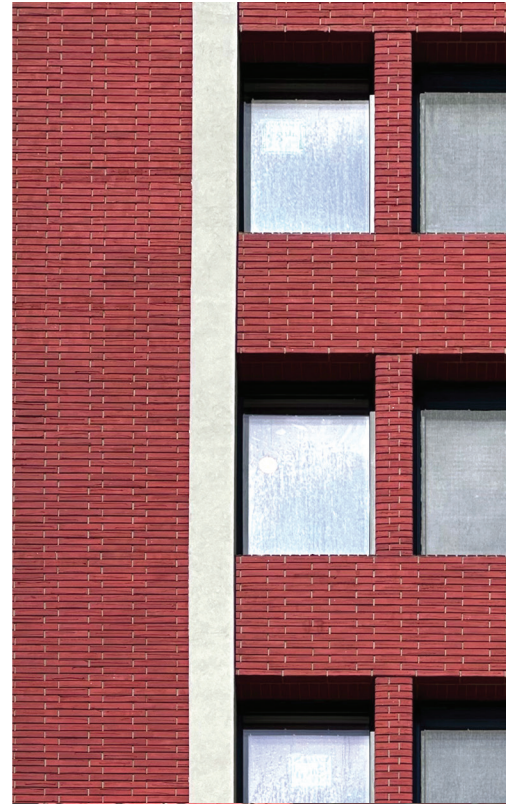
Made by using a resin-molded process to create thin brick slips, StoCast Brick is available in 30 standard bricks or project-specific colors, patterns, and textures. StoCast Brick is the ideal solution when the project calls for either a traditional or customized "classic" brick look. For Linden Grove, the team selected StoCast Brick style G1.VT231562, which provided the traditional Brooklyn look the owner envisioned.

But, the architectural design of the building was extremely detailed. Even with a product as versatile as StoCast Brick, some planning was necessary. Rich Sangiorgi, owner of Elite Wall Systems, brought his nearly 40 years of construction experience to bear in creating a plan—complete with shop drawings within two weeks' time.

Working alongside the Sto technical team that provided on-site support, Sangiorgi addressed the challenge of difficult returns and devised a clever plan to prefabricate nearly 80% of the modular panels in the shop. Both the architect and developer approved the creative solutions, and the applicators went to work.

The team at Elite Wall Systems obtained field measurements for each panel, then returned to the shop to apply the StoCast Brick. Applying the StoCast Brick to the panels while the panels lay flat meant the applicators weren't fighting gravity, which would limit the battles with the New York winter. Finally, they numbered each panel to ensure precise placement on the jobsite.

"StoCast Brick can do everything that real brick does, and it is the most authentic-looking faux brick product on the market. Plus, it's incredibly lightweight and can be cut with snips—no wet saw is needed! It turned out beautiful," commented Sangiorgi.

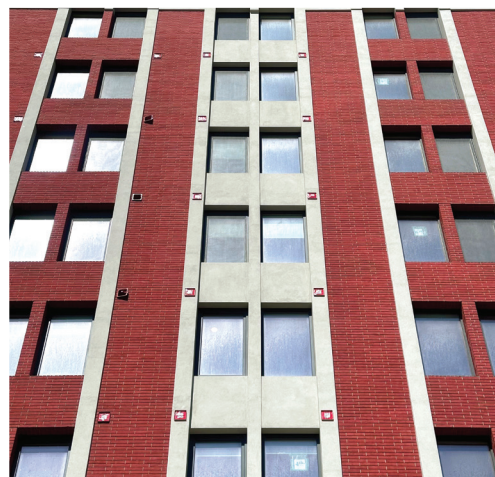
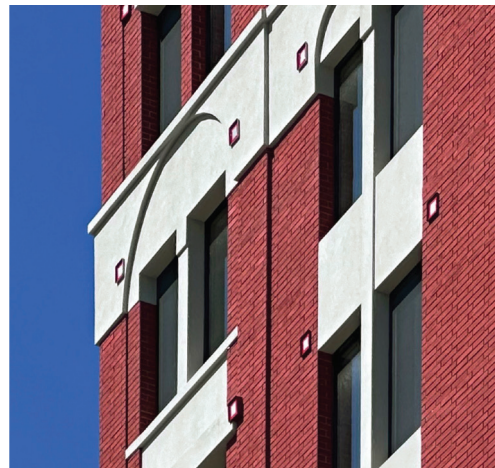




Affordable Housing Built to Perform

Linden Grove stands today as proof that affordable housing can combine sustainability, innovation, and beauty. Beneath that very compelling brick aesthetic lies a high-performance structure built with modular efficiency, Passive House energy standards, and modern cladding technology.

"I challenge architects to think differently," said Dan Canova, Sto sales representative. "Brick has been around a long time, and it's beautiful, but it also has some negative aspects, as it relates to sustainability. StoCast Brick looks like the real thing and is much gentler on the environment."





The Tools to Make Your Vision a Reality.

Combining innovative design and high-level performance, StoTherm ci offers a unique approach to wall system installation. These fully engineered systems provide unmatched versatility with an array of design options that include unique textures, colors, shapes, and materials to suit any creative vision. With StoTherm ci, you get innovative products, forward-thinking design, and durable performance that surpasses your expectations. Rest assured, Sto is there wherever your inspiration leads.

Creativity Begins. **Sto Finishes.**®



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