The FUTURE of PREFAB
BLUE SKY HOMES, p.159
Feature

79 No Building Stands Alone
Architecture firm Peter Gluck and Partners designs and builds modern structures that serve their surrounding New York communities, and allow residents to actively engage in those areas. Pictured: Peter Gluck and Partners' East Harlem School.

Photo: Erik Freeland, freelandarch.com.
No Building Stands Alone

The socially conscious architects at Peter Gluck and Partners reface underserved New York neighborhoods

BY ANNIE FISCHER
Peter L. Gluck, the founder and principal of New York-based Peter Gluck and Partners Architects (PG+P), has taught at the Columbia and Yale schools of architecture, curated exhibitions at the Museum of Modern Art and the Milan Triennale, and published work in architectural journals around the world. He is credited with co-pioneering the design-build culture at Yale, out of which came the Yale Building Project—an important and long-standing initiative that pairs graduate architecture students with community-based clients.

Gluck is concerned that the word “responsible” has become a synonym for something good. “Responsible just means taking the least amount of time and risk,” he says. “With this approach, the cost is often so far beyond the project’s actual value that in the end, the project is irresponsible.” Since 1972, PG+P has worked directly with the variables of time and risk. From conception to closeout, these designers provide cutting-edge architectural solutions without the cost overruns typical of a multiple-source construction approach. Joined in 1992 by ARCS Construction Services, a construction-management company established by Gluck to build the firm’s designs, and joined in 1997 by Aspen GK, LLC, a development partnership that produces high-end and affordable spec housing, PG+P’s 40-member team now exhibits expertise in all facets of its distinctive method.

Although the firm doesn’t specialize in a particular building type—PG+P has designed residences, hotels, religious buildings, and schools—its work for nonprofit organizations in New York’s urban neighborhoods is particularly notable. ORO Editions recently published a monograph exploring PG+P’s practices, called *The Modern Impulse. Peter L. Gluck and Partners*, in which Gluck outlines his design principles. “The artistic inspiration and resolution of the modern impulse rests
“Responsible just means taking the least amount of time and risk. With this approach, the cost is often so far beyond the project’s actual value that in the end, the project is irresponsible.”

PETER GLUCK, FOUNDER & PRINCIPAL
on four analytic attributes: use, structure, context, and social effect," he says. In a perfect design, the four attributes overlap to a maximum degree, resulting in a structure that thoughtfully and successfully considers form and function as well as the building’s surroundings and impact. That “perfect” design is an impossible ideal, but Gluck also laments widespread design tendencies that demonstrate minimal overlap—including the “responsible” building, which considers use or function above all else. “Particularly with inner-city buildings, there is no time allocated to investigate anything beyond function,” Gluck says. “No one considers the social component or the structure: How does it fit into the community? Does it look institutional? Is it too defensive? Does it only use materials kids can’t hurt?”

To demonstrate the potential impact of such an investigation, PG+P partners with underserved community organizations and proves that high-quality, modern architecture can be affordable. By taking on the dual role of architect and builder, the firm eliminates a costly contractor and funnels any would-be profits back into design.

The results of these efforts are realized in projects like The East Harlem School, an independent, year-round middle school that houses 160 students from the neighborhood’s low-income families.

Completed in November 2008, the AIA award-winning building includes 27,800 square feet of offices, classrooms, science labs, a library, gym, cafeteria, and outdoor playspace.

The pixelated facade of the four-story structure offers street visibility on the lower levels—which contain public spaces, so the building doesn’t feel completely isolated from its community—whereas the screened windows on upper floors provide the privacy needed for serious study.

Similarly, East Harlem’s Little Sisters of the Assumption Family Health Services fronts five stories of glass and colored panels. The unique design is meant to create an inviting image for the neighborhood it serves, and a column-free, steel structural frame offers flexibility and allows Little Sisters to easily reconfigure its space in the future as the building’s needs change. For Legal Outreach—an educational-programming organization based in Astoria, Queens—the street entry was prominently featured in the redesign of the former factory. A central staircase visually connects all three floors, and a multipurpose room/student lounge grounds the center of the building. Each element underscores community as an important aspect of the students’ lives. Other community projects include the Harlem RBI afterschool-program space and baseball/softball field, a year-round playspace for the St. Ann School, and a bright blue urban condo with 12 residential units, a structure created from an existing warehouse in East Harlem.

“Understanding use and context are the critical first steps of a project,” says Stacie Wong, principal and lead architect for school design at PG+P. “The structure evolves from there, and if the building successfully meets the use and context requirements, the social effect will be inevitable.” PG+P’s cost-saving design-build process
permits more than thoughtful design, though. It allows funds to be used for higher-quality materials—ones with longer life cycles that require less maintenance. "Our goal is to give the client as much as they can possibly get for their dollar," Wong says.

Finding the correct balance is tricky. The firm doesn't want to be too conservative in construction-cost estimates, which might sacrifice the overall size of the project, but at the same time, if PG+P is too aggressive, the project will end up with cost overruns. The team first breaks the building trades into base-building and finish-building categories and inserts estimates for each line item with variations that can affect the design and the cost. According to Marc Gee, principal and construction expert at PG+P, this allows the architects to identify trades that represent major costs, trades with potential unknowns, and trades with design flexibility. "Base
building is the infrastructure. Trades like foundations, structural steel, and HVAC systems that take up the largest percentage of the overall cost yield the least flexibility for change and have the greatest potential for cost overruns if mismanaged," he says. The team outlines the level of finishes it hopes to achieve within the client's budget and identifies potential upgrades for which to aim through the use of aggressive bidding and efficient on-site trade management.

As project managers and on-site construction supervisors for The East Harlem School, Wong and Gee point to a number of strategies that allowed the team to save the school enormous costs. Because the building is in the FEMA 100-year flood zone, the initial budget included a fully flood-proofed foundation and a substantial pile foundation. PG+P modified the design and raised the cellar slab up above the water table, which reduced physical costs and shortened overall construction time; they also scheduled pile-driving for winter months when the ground was frozen, which allowed the team to forgo expensive rig mats. PG+P saved significant money in each trade by hard competitive bidding with up to as many as eight bidders per trade.

Furthermore, on more than $5 million of base building work, change orders reached only $19,000, a savings that speaks to the value of the firm's in-depth drawings and specifications. Each drawing set is created specifically per trade—a streamlined process that allows subcontractors to quickly and easily identify expectations. This method also allows the designers to break the trades into smaller packages if the bidding environment suggests potential savings such as using different concrete contractors for foundations and sidewalks or breaking HVAC contracts into parts like hot-water heating, air conditioning, and controls.

"This requires more coordination on our part but often permits the use of smaller specialized tradesmen,

Right: The hued steps of Legal Outreach give the urban building a modern feel. Far right: Glass walls in Legal Outreach's interior permit sunlight throughout the space. Photos: Erik Freeland.
“Our goal is to give the client as much as they can possibly get for their dollar.”

STACIE WONG, PRINCIPAL & LEAD ARCHITECT FOR SCHOOL DESIGN

more control over the individual trades, and more control over construction sequencing,” Gee says. The end result is better design at a lower cost. In addition to using zero funds allocated in the Construction Contingency, The East Harlem School project came in $500,000 under budget—savings the school instead applied toward their endowment.

The design-build process also allows PG+P to maintain involvement with the client over a longer period of time. When construction began for Legal Outreach, it was apparent that some of the on-paper decisions weren’t going to translate; the executive director’s office, for example, was too small and too public. The fix was a simple one, but had the client been required to go through the typical series of channels, costs would have added up. “It easily could have become a $100,000 change order,” says principal Charlie Kaplan, PG+P’s lead housing architect. “But our process allows us to respond to clients’ needs quickly and inexpensively.”

The firm’s method breeds trust, which Wong says is critical in establishing an effective partnership. The assurance is further fostered through open and constant communication and transparency in everything from the logic behind the design to how money is spent during construction. Even into the last stages of a project, PG+P sustains contact by spending as much time as necessary with the client so they understand how to operate and maintain the building for the long term. “We learn as much as possible from the client to understand their core needs, which often leads to smarter ways of approaching each project to maximize its potential,” Wong says.

The payoffs are invaluable. In the case of Legal Outreach, preliminary space planning and cost studies were performed for five years prior to choosing the
"It's really difficult to make a really good building at all. But we know it's important, and that's why we do it."

PETER GLUCK, FOUND & PRINCIPAL

Name: Urban Condo
Project summary: Renovation of pre-existing warehouse
Location: East Harlem, NY
Client: 232 Development, LLC
Cost: $2.4 million
Completed: 2007
Program: 12 residential units
Square footage: 14,400
Height: 6 stories
Design features: Glass curtain walls on façade and west side of building make up for insufficient light; blue-glazed ceramic tiles provide distinction and mimic brick patterns of pre-existing structure.

Photo: Christian Phillips.

school's eventual site as an inflated real-estate market complicated the budget. With Little Sisters, the building's long-span structure provides short-term flexibility of use for the organization, but it also maximizes the future value of the building by allowing for easy change in the long-term as well. Finally, for The East Harlem School, PG+P met with every constituent—students, alumni, teachers, administrative staff, support staff, and parents—to understand what made the school unique. Simultaneously, the team analyzed the building site from a developer's perspective and found that the structure best suited for the intimate nature of the school was significantly smaller than what the site could accommodate. Rather than leaving unused development rights on the table, the team chose to develop only a portion and left an empty lot and transferable air rights for future development. "We are not only interested in buildings that function well but in smart buildings that are huge financial assets for our clients," Wong says.

Overall, PG+P's design-build process makes a statement that distinction can be achieved affordably for community projects and simultaneously show fiscal responsibility and respect for the neighborhood. The latter accomplishment is one that Gluck champions in particular. When he approaches these projects, he is mindful of pride and says it's imperative that a building looks like someone cares about it.

Wong says that for both Little Sisters and The East Harlem School, there were numerous discussions regarding the face the buildings would present. Both organizations have deep roots in the neighborhood, and both were conscious of the fact that the appearance of
the buildings would have a major impact. Moreover, neither wanted the buildings to stand apart from the community it serves. Initially the organizations were not certain they wanted their buildings to stand out at all. Through an extensive design process in which numerous options were presented using physical models, both embraced the idea that creating a forward-thinking building does architecturally what the organizations themselves do socially.

Kaplan puts it a different way. According to him, by the time the form of the building finally emerges, the outward design is so intrinsically connected with the other attributes that the way it looks seems like a forgone conclusion. "By then it is what it is because it has to be," he says. What it has to be is high-quality, cost-effective modern architecture, and that isn’t easy. "It isn’t more difficult to do these projects well," Gluck says. "It’s really difficult to make a really good building at all. But we know it’s important, and that’s why we do it."

**Name:** Harlem RBI
**Afterschool Program**
**Project summary:** Indoor and outdoor space that provides 400 inner-city youth with after-school programs
**Location:** East Harlem
**Client:** Harlem RBI
**Cost:** $695,000 field; $195,000 interior space
**Completed:** 2005
**Program:** Baseball field, office, garden, and tutoring space
**Square footage:** 3,300

**Name:** St. Ann School Playspace
**Project Summary:** Year-round playspace constructed on small lot adjacent to church
**Location:** East Harlem
**Client:** St. Ann School
**Cost:** $295,377
**Completed:** 2002
**Program:** Multipurpose space including basketball court, all-seasons gym, and assembly space
**Square footage:** 2,700
**Height:** 1 story
**Design features:** No maintenance required on building systems: translucent plastic roof allows natural light; sliding fiberglass walls open for ventilation; infrared panels heat space in winter.