

Rice Building Workshop 1997- 2004

Rice Building Workshop and Project Row Houses

Houston, Texas

NONYA GRENADER, FAIA

DANNY SAMUELS, FAIA

Rice University

In 1997, the Rice University School of Architecture established the Rice Building Workshop with the goal of bringing students out of their classrooms and into a community with a critical need for affordable housing and design services. The school partnered with Project Row Houses, a local non-profit group dedicated to neighborhood revitalization, historic preservation, community services, public art, and art education. This community group occupied an inner-city district rich in African-American traditions and culture, and when our collaboration began, Project Row Houses hoped their services could expand to further enrich the neighborhood.

For the past eight years, 160 Rice architecture students at all levels have participated in the evolution of this neighborhood revitalization project. Rice School of Architecture Dean Lars Lerup sees the program as a vital component of education at Rice. "Caught up in the most euphoric state of the revolution, it may be considered both expedient and compelling to put all the resources of a school of architecture into the electronic studio. Here, we think differently. Parallel with a strong commitment to 'e,' we have put solid resources behind 'b,' that is building with your own hands."

Beyond design and construction, students have had the opportunity to meet with our community clients, obtain building materials, design and produce fund raising literature, and prepare documents for city approval. Led by RBW directors Danny Samuels FAIA and Nonya Grenader FAIA, the work-



shop has additionally engaged local practitioners, consultants, material suppliers, and craftspeople to share their expertise with students and aid in community efforts.

As a result of our community collaboration, Rice Building Workshop has designed and built two houses. The first design/build project, a 900 square-foot house, was conceived as a low-cost prototype that may be configured in a variety of ways. This modular house, six over six square units (that measure 10'-8" at each side), utilizes materials and concepts found in neighboring homes such as deep overhangs and double-hung windows that are aligned for cross-ventilation. Shaded porches extend living spaces and allow traditional community relationships to occur. Modular floor and fram-



ing panels were constructed on campus and taken to the site for assembly. On-site construction brought students together with community volunteers. Completed in 1999, the Six-Square House has become the home to a mother and her two children and as a prototype; has generated a range of variations.

As RBW continued to work within the community, we observed that many people were displaced when the row houses they once inhabited were demolished by developers moving into the neighborhood. This led us to focus on a segment of today's housing market that is often neglected—an extra small house for one or two people. The challenge was to design and build a dwelling of modest size (500-square feet) with a small projected budget (\$25,000.00) while implementing innovative design and construction techniques. Our goal with this project was to suggest that this housing type was still viable for those with limited funds, limited land, or a desire to live simply and use fewer resources. Again, the design of this house is sensitive to its surroundings and borrows design con-

cepts found in neighboring homes. Features such as generous porches, deep overhangs, and aligned openings are rendered with modern construction methods and materials. A thickened wall provides additional insulation from the Western sun exposure and provides the house with ample storage and services.

The house is a modern interpretation of the shotgun-style row house that once populated many areas in the southern United States. An adjustable footing/foundation system lifts the building off the ground much like the concrete block footings that are used to support the original row houses located within this community. Because of the unstable soils found in this part of the country, the extra-small house's footings may be adjusted as the structure settles over time. Hardiplank walls and metal windows are used in place of wood products to minimize maintenance and upkeep. The core of the house is wrapped in translucent polycarbonate which distributes light throughout the structure. The core contains the bathroom and houses the kitchen along its outer edge. The placement of this single element divides the interior into "large"



and “small” spaces that may be furnished in a variety of ways.

Additionally, RBW has renovated a modular shipping container to create a “work box” that is an on-site shop, designed various housing prototypes (including a recently-built duplex plan), and provided master planning for the future development of this transitional neighborhood. Existing houses now mix with new dwellings, commercial buildings

have been renovated, and vacant lots have been carefully considered and re-organized according to land-use plans that create a thriving blend of affordable housing, community services, and art venues.

At various scales, students explore the construction process and allow the act of building to inform all aspects of design. The Workshop takes a broad view: a project or building is seen less as an object, and more as a dynamic system that evolves and adapts over time to a changing environment. Budget, schedule, and construction constraints test conceptual ideas as students work together to transform designs into built contributions to the community beyond their classrooms. The Rice School of Architecture has collaborated with a community revitalization group to improve a neighborhood and as Kim Neuscheler, a former student, noted in *Good Deeds, Good Design*:

“For me, registering for the spring semester of the 1997 Building Workshop began as a mere desire to complete a final curriculum requirement, but inevitably became an endeavor to which I became dedicated for the next three years. The intention of the workshop is to give students hands-on practical experience with real-life projects within the community. In a larger sense, the camaraderie we shared and the respect for each other—the sense of place and the sense of community—while devoting our time to the project was irreplaceable.”