

## **21st Street Condominiums, Brooklyn, NY**

### Old House/New House

The narrative for this project was driven by the site. An old frame house situated on an underdeveloped site sits directly adjacent to a church near Greenwood Cemetery in Brooklyn. The house was to be kept and altered while building a significant addition to the rear. Our solution was to accentuate the meeting of these two volumes both spatially and materially. The old house was gutted, stripped of its siding, structurally reinforced and clad in stucco. New windows were inserted as punched openings. The addition, which by code had to be of non-combustible construction, was built of steel framing and concrete floors, and clad in corrugated metal. Floor to ceiling windows face south, and strip windows open onto the lot line, framing views of the adjacent church. Because of the existing certificate of occupancy, a fire escape was required on the rear of the house. This became an opportunity to provide easy access to the roof deck and create a sculptural volume. The house is located within an R6B zoning district. This is contextual zoning. This project is in keeping with the existing three story buildings of the neighborhood, and maintains the existing street wall of the original house.

The house boasts significant sustainable features. It is the first Energy Star rated project in Brooklyn which means that the house uses 30% less energy than required by the model energy code. The building volume is super insulated. The south facing rear windows admit winter sun, and the concrete floors are a significant thermal mass, while the overhanging balconies of the fire escape provide shading from the summer sun. The fire escape serves as a trellis for vines. The front roof is designed for the installation of photo voltaic panels, and has conduit ready for the installation. The original concept called for a trellis above the roof deck to support PV panels. Lighting is provided by high quality linear and compact fluorescents, many of which are dimmable. Air conditioning uses Puron refrigerant that is not ozone depleting. All windows have low E and argon filled insulated glass. All appliances are Energy Star rated. Flooring is the structural concrete in the addition, while the floors of the original frame house are bamboo, a sustainable material. Carpeting in the hallways is from Interface, a company that subscribes to the principals of cradle to cradle.